RELATIONSHIP PSYCHOTHERAPY AND SCIENTIFIC MEDICINE

- an examination of Sullivan's communication by relationship


Introduction: pages 1-6

Part I: GENESIS OF DOCTOR-PATIENT RELATIONSHIP. page 7

Chapter I - ROLE OF PSYCHOTHERAPY IN MEDICINE. page 7

- Limits of scientific medicine. pages 8-9
- Role of psychotherapy in psychiatry. pages 9-14
- Psychotherapy implicit in doctor-patient relationship. pages 14-15
- The objective and subjective in medicine. pages 15-18

Chapter 2 - STRUCTURED ASPECTS OF THE PSYCHOTHERAPEUTIC SITUATION. page 19

- Definition of Psychotherapy. pages 19-20
- Historical background of doctor-patient relationship in general medicine. pages 20-24
- Doctor-patient relationship in psychotherapy. pages 24-28

Chapter 3 - TECHNICAL PROCEDURES IN PSYCHOTHERAPY. page 29

- Sullivan's interpersonal situation. pages 29-32
- Vicissitudes of the relationship. pages 32-35
- Transactions. pages 35-37
- The role of the patient. pages 37-39
- The dynamics of the cure. pages 39-42
- Further sociological perspectives. pages 42-45



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

Part II: THE DOCTOR-PATIENT RELATIONSHIP AS SCIENCE AND AS ART. page 46

Chapter 4 - PSYCHOTHERAPY AND SCIENCE. page 46

Historical note. pages 46-49
Some demurrers. pages 49-54
Present Status of Psychotherapy. pages 54-57

Chapter 5 - SCIENTIFIC TRUTH AND POETIC TRUTH. page 58

The old and the new in science. pages 58-59
Limitations of Scientific Knowledge. pages 59-61
The "new" science and the Humanistic Sciences. pages 61-66
Applicability of physical theories to humanistic sciences. pages 66-73
Creative Imagination in Art and Science. pages 73-77
Windelband's suggested synthesis. pages 77-79

Chapter 6 - PSYCHOTHERAPY AND ART. page 80

Mutual fields of interest. pages 80-82
Artist and Psychotherapist. pages 82-84
The Truth Value of the senses. pages 84-85
Poetic anticipation of Psychotherapeutic concepts. pages 85-87
Interpersonal Psychiatry and Aesthetics. pages 87-92
The Aesthetic Dimension. pages 92-94

---

Part III: COMMUNICATION IN THE DOCTOR-PATIENT RELATIONSHIP. Outline of communication principles in psychotherapy. page 95

Chapter 7 - COMMUNICATION - THE AUDITORY MODALITY. page 95

The need for Communication. pages 97-98
The inexactness of Language. pages 98-101
Language as Behaviour. pages 101-04
Intellectual and Non-Intellectual use of words. pages 104-06
Sullivan's verbal behaviour. pages 106-10
Vocal Tone. pages 110-16

Chapter 8 - COMMUNICATION - THE VISUAL MODALITY. page 117

Sullivan's use of Gesture. pages 117-19
Pre-language role of Gesture. pages 119-21
Gesture and Speech. pages 121-24
Emotional Expression by Gesture. pages 124-28

Chapter 9 - COMMUNICATION - THE KINAESTHETIC MODALITY page 129

Empathy. pages 129-31
Psychophysiology of Empathy. pages 131-39
Synaesthesia. pages 138-47

---

Summary of Chapters: pages 148-53

Epilogue: pages 154-61

Bibliography: pages 162-76

# INTRODUCTION

Up to the Middle Ages, Mecidine was a branch of philosophy. In his analysis of the advancement of learning, Bacon includes it with that section of philosophy which is called human philosophy. In its relative ignorance and impotence at that time medicine was forced to reflect on man's infinite helplessness in face of the forces which opposed him, his vulnerability to disease whose nature was as mysterious as it well could be; and speculation on the eternal verities compensated for frequent failure in the application of what principles of medicine then existed.

At the end of the dark ages with the coming of the scientific method, repeated observation, classification, and systematization, the elaboration of hypotheses, and experimentation and prediction upon these hypotheses, made abundant new and practical information available; and although the movement has continued in medicine with great zeal and has even accelerated its pace in recent years, yet there is still a need to see factors in illness other than an objective description of malfunctioning; and these factors cannot always be stated in terms of the exact sciences. Armed with abundant symptomatic detail and pathological data concerning a given individual, it may still be difficult to

apportion to him, to the correct diagnostic category, to the to the appropriate medical or surgical or other specialist, and progression from one specialist to another not infrequently occurs, because diagnosis has become increasingly ambiguous - for example, which of the pathological symptoms should be given the highest rank in the hierarchy?

This apologia for re-investigating some of what Riese (1956) has called the philosophical presuppositions of present day medicine, is no more than acknowledging the need to see how, in each age, our science must re-examine its role in the broader social scene. Psychiatrists and psychologists can be divided roughly into two groups (Cole 1951): "there are those who wear the philosophical hair shirt, who continually turn back to examine their basic postulates, as though plagued by doubt; and there are those others who are preoccupied with their labours in the scientific vineyard, working to satisfy a healthy curiosity and not at all concerned to find any justification for their work.

The experimentalists, having staked out their claim to a limited territory which contains soluble problems, are primarily concerned with the fruits of their labours, and they feel little sympathy for the concerns of

those others who are, or seem to be, ever ready to reallocate the land of the vineyard, to pull up the tender vines, to examine their roots, to criticize the methods of cultivation and, in general, spend their days in profitless talk. The experimentalists see that there is useful work to be done".

In spite of this, the attempt will be made, by a re-examination of the published work, to draw certain conclusions which will explain something of the nature of the relationship between patient and physician as it exists in its most intense form, namely in psychotherapy.

It is aximoatic that anyone practising psychotherapy and taking a critical interest in the work must take psychoanalysis heavily into account. For the workaday psychiatrist engaged in mental hospital practice (and there can be little doubt that in any practical sense these are the people who deal with the lion's share of such psychopathology as exists in the nation) the desideratum of a personal training in psychotherapy is virtually unattainable. Nevertheless, he may well believe that he is obliged to offer such treatment as he can to his patient according to his lights, even though the conditions under which such psychotherapy has to be practised are remote from such conditions as are envisaged by the various schools as being essential for success. Apart from the lack of formal training there is also the question of the numbers involved.

The Mental Health Services lay a case load on the individual psychiatrist far in excess of the ideal for psychotherapy. The pressure on hospital beds and even pressure on out-patient lists have made the introduction of shorter methods imperative if psychotherapy were not to remain the prerogative of the privileged few. So the emergence of the Neo-Freudian Revisionists of late years has been welcomed by the workers in the field as offering them methods by which they could at least begin to tackle the volume of work confronting them. These have included thinkers such as Horney (1951), Fromm (1950), Alexander (1952), Rogers and Sullivan (1945, 1953, 1954). It seems that in North America the Washington school of psychiatry, with which the name of Sullivan is associated, has achieved considerable success, (Stanton & Schwarz (1954), Jones & Rapoport (1955)), probably because it is well in line with current psychiatric predilection to look to anthropology and sociology for additional means of gaining insight into the significance of behaviour. Since no native British school has emerged with such clarity it is hardly surprising that most psychiatrists in this country are content to label themselves "eclectic".

Sullivan has left no complete method or extensive philosophy - he accepted most of the Freudian teaching - but he gave his attention particularly to the actual method of

conducting the interview and the kind of exchange which took place between the participants in the interview. With his interest in the social sciences, he carried over methods and ways of thinking from social psychology and anthropology, and he directed his attention particularly to problems of communication. So long as communication is free and satisfactory Sullivan sees this as the chief aim of therapy. Patient and therapist work together to achieve this and the therapist has to be expert in interpersonal relations so that he may recognise communication difficulties in the patient. In order to do this the therapist has to participate more actively in the exchanges than he was wont to do in orthodox Freudian therapy - in fact, he becomes a participant observer, and the method itself sees psychiatry as a study of interpersonal relationships. Sullivan was like Jung, but unlike many leaders in psychotherapy was originally a mental hospital psychiatrist, working with psychotics. It may be that this accounts for a good deal of his easy appeal to those who are still engaged in this task.

This survey will attempt to examine the nature of the doctor-patient relationship in those aspects which usually remain unconscious, i.e., those aspects which are primarily sociological, historical, and cultural and lie altogether outside of any particular intellectual technique. Part I is devoted to these considerations which are common to all

branches of medicine. Part III examines the factors at work when this general relationship is intensified and deepened in the more acute and analytic relationship which is Sullivan's psychotherapy. Such emphasis as Sullivan places on the doctor-patient relationship is believed by the writer to be a necessary emphasis on an aspect of all medicine which is in need of constant restatement (Ferguson 1956). Some of the consquences of his interpretation of communication will be argued. In Part II those will be examined in the light of the scientific method which he claimed to follow. This will entail a consideration of the standing of any psychotherapy within the framework of a system of medicine whose orientation is rigidly scientific.

# PART I.

## GENESIS OF DOCTOR-PATIENT RELATIONSHIP

### Chapter 1.

### ROLE OF PSYCHOTHERAPY IN MEDICINE

The twentieth century has seen rapid growth of technologies derived from the exact sciences. The changes which are taking place in industry and many other spheres of everyday life follow naturally from increasing familiarity and mastery over the laws of, for example, electronics and other physical sciences. The effect of technology on war has become a chief concern of world government. Devotion to scientific method has become an essential quality in all who would add to the sum of knowledge. Indeed whereas for centuries the summum bonum in knowledge was philosophy, this place is now occupied by scientific method, and philosophy has shrunk to linguistic analysis.

The repercussions on Medicine have been obvious enough. Refined methods of investigation - biological, chemical, electrophysiological, radiological and so on, are being ever more widely carried out: indeed, in some ways, the progressiveness and eminence of a clinic or hospital depends in part on the refinement of the investigations it can carry out. Therapeutics took a great leap forward when the scientifically trained mind of Fleming appreciated the significance of a chance and simple observation in the

laboratory, and thereby inaugurated a whole line of antibiotics. This incident is a characteristic example of how science has gained and maintained a high value in our culture. Scientific laws can reveal new meanings in well known facts. The scientific ideal is held constantly before us. The results of treatment are subjected to mathematical scrutiny, and criteria of cure have to be established and examined in the light of the theory of probability, before any serious attention can be given to them.

Limits of Scientific Medicine:

Nevertheless along with this increasing alignment with the exact sciences, there has occurred growing appreciation of the need also to take into account the behavioural sciences which are not quite so exact. Chief among these is psychology. "Psychological medicine continues to advance with acceleration in all its divisions. Its frontiers expand..... Thus a psychiatrist may be asked to advise on problems ranging from alcoholism to schizophrenia and from marital discord to the ills of nations " (Munro 1956). It is generally agreed that the referral of increasing numbers of patients by general physicians to psychiatrists represents not so much an absolute increase in neurosis and psychosis, as an enlarging general awareness that much somatic illness does not yield

to standard methods of treatment based on physiological principles. Balint (1954) among many other writers has marshalled the evidence that from 25% - 50% of all illness presenting at the consulting room or clinic falls properly into the category of psychological or emotional illness, though the figures vary from 60% (Murray 1949) to 30% (Affleck 1947). Pinsent (1951) in a bold venture in his general practice treated 25% of his patients by verbal methods, with an improved cure rate and an all over shortening of treatment time, though initial interviews were of course much longer. In short, the rapid expanse of the Mental Health Services this century, and the steady increase in the numbers of the mentally ill - from 13,916 voluntary patients to 58,927 in the last ten years (Ministry of Health Report 1955) and total admissions to mental hospitals of all patients from 29,576 to 78,586 in the same period - these figures represent to some extent the turning of general medicine to psychiatry for the solution of some of its most intractable problems.

Role of Psychotherapy in Psychiatry:

The foregoing has attempted to show that medicine, in spite of its acute scientific awareness and its increasing emphasis on a scientific basis, has had to yield up some of its territory to psychiatry, probably the least scientific of its subdivisions. Having argued therefore that scientific medicine needs psychiatry, there remains to be established the

role of psychotherapy in psychiatry. One has to acknowledge that a distressing dichotomy has existed in psychiatry, perhaps especially in British psychiatry, in the last twenty years, beginning with what might be called the first physiological revolution - the introduction of the shock therapies. The tradition of the moral treatment of the insane which had held sway for the last hundred years and had been so successful in its struggle for humanism, no longer dominated the field. "I feel dismay at the possible continuation of the present state of affairs " (Hill 1954). "My wish..... is to see a psychiatry which is one and undivided, and which to my way of thinking must be fundamentally psychologically oriented. For the results (of physiological treatment) are too uncertain to warrant complacency, and this suggests that greater attention should be directed to the psychological consequences and the way in which such treatment will affect any given patient. To do this, a study of the psychological structure and the psychopathology of every patient is as necessary before the decision is made to exhibit one of these treatments, as the recognition of any constellation of symptoms in a patient. There is a risk that psychiatry dominated by physical methods of treatment and promoting little but physiological research related to them, will regress to unpsychological attitudes to mental disorder such as existed at the beginning of this century when Kraepelin had laid the foundation of his descriptive work".

The physical or physiological revolution in psychiatry falls naturally into two phases - (1) the decade 1930-1940 when Electroconvulsive treatment, insulin comas, and leucotomy were introduced and (2) the middle 1950's when the so-called chemical tranquilizers had such a distinct initial success. Psychiatrists with biological leanings vigorously applied all these methods as they were evolved, striving for an ever closer association between psychiatry and general medicine. Sargant may be considered as probably one of the best known advocates of the shock treatments and leucotomies. Yet he says, in a book devoted exclusively to physical methods "The scope for psychotherapy remains enormous and will probably still expand. There will never be a time when there are people not at odds with themselves or their circumstances and in need of the help of the trained psychotherapist. Psychotherapy does not consist merely of suggestion and support, but it may involve a re-orientation of fundamental drives, and when successful bring about a lot of far-reaching alterations of the patient's attitudes to himself and his environment..... The patient who has undergone leucotomy is often much in need of psychotherapy, even though it be other than of an intensive or analytic kind..... Leucotomy may be necessary after years of illness in the chronic anxiety neurotic who could have been cured by psychotherapy in the

earliest stages..... In the co-ordinated totality of treatment therefore, psychotherapy has a defined but almost inevitable part. It should indeed precede, accompany and terminate physical therapy, not only in psychiatric, but in all medical and surgical disorders" (Sargant and Slater 1954, p. 310-314).

We are now in the midst of what many psychiatrists regard as the second physiological revolution: for the last two years workers in mental illness have been using such drugs as chlorpromazine and reserpine in a wide variety of psychiatric disorders. Literally hundreds of reports of their use have already been published in different parts of the world - nearly all, after the first enthusiastic few, have attempted to apply the scientific method, to make the results of the trials assessable statistically for example, and yet, despite this, few clear trends in the range and direction of applicability emerge. Reports vary from the over-enthusiastic (Noce Williams and Rapaport 1954) to the sceptical (Bennett Ford and Turk 1956). The pattern is becoming fairly familiar in medical history. A new remedy is introduced, good results are obtained, optimism rises to apeak then a few side effects are described, some cases fail to respond and gradually the new drug settles down to its appropriate place, great or small, in the therapeutic armamentarium (Brit. Med. Jnl. 1956). It would seem that with such variation in results there must be other hidden

factors also powerfully at work (Donnelly and Zeller 1956, Feldman 1956). The environmental setting and the personal bias of the research worker are themselves variables which interfere with research design in a statistically significant way.

However, since many well documented recoveries have occurred in association with this new 'psychopharmacology' (the word is Hoch's, 1956), and since the introduction gives hope, along with the psychotigenic drugs, of new neurophysiological understanding, the change certainly has been an important one for psychiatry. Yet many writers here again name psychotherapy as fulfilling an essential role (Kovitz, Carter and Addison, 1955, Cowden Zax and Sproles, 1955, Tourney, Isberg and Gottlieb, 1955, Hoch, 1956, Ferguson, 1956). These papers are all written according to acceptable scientific principles.

> "Symptomatic use of these drugs (chloropromazine and reserpine) cannot replace adequate therapeutic attention to the patient's underlying problems. The opportunity to release emotion with less anxiety or impulsiveness is advantageous for psychotherapy with psychotics." (Kovitz, Carter and Addison, 1955).

> "The greatest improvement occurred when reserpine was used along with psychotherapy." (Cowden, Zax and Sproles, 1955).

> "The amelioration of symptoms (by reserpine) improves ward morale, and fosters better personnel-patient relationships. Patients begin to socialize and for the first time are able to verbalize some of their emotional difficulties in therapeutic interviews. Therefore reserpine appears to be a valuable adjunct to supportive and psychotherapeutic programmes." (Tourney, Ixberg and Gottlieb, 1955).

"The use of chlorpromazine and reserpine has raised very interesting questions about the relationship of these drugs to psychotherapy. Every shred of evidence points to the assumption that both these drugs afford purely symptomatic relief and that they operate principally in reducing anxiety..... in our experience psychotherapy has been facilitated and we have been impressed by the number of acutely disturbed state hospital patients who, after being relieved of their acute symptoms, have asked spontaneously for psychotherapy. The demand for these services is encouraging..... (and) certainly we do not see chlorpromazine and reserpine as alternatives to psychotherapy, rather we regard them as adjuvants." (Hoch, 1956).

"It is not suggested for a moment that reserpine is more than just an introduction and an adjunct to psychotherapy which must still remain the supreme therapeutic weapon." (Ferguson, 1956).

Psychotherapy Implicit in Doctor-Patient Relationship:

Medicine therefore, rigorously scientific as it is, needs psychiatry and psychiatry, as we have just noted, must include psychotherapy. The point has been laboured to some extent for many British schools of psychiatry are openly critical, even cynical, towards psychotherapy. But psychotherapy exists all through medicine and in its simplest form it may be called the doctor-patient relationship. If psychotherapy is discarded then the doctor-patient relationship vanishes. Attention has been drawn to the deterioration of the doctor-patient relationship in recent years (Ferguson, 1956) as evinced by the increasing litigation against doctors (Fifty Second Annual Report of the Medical and Dental Defence Union of Scotland, 1954) and Needles (1954) has

pointed out that when doctors knew very little they were highly esteemed; now in an age of unparalleled therapeutic excellence they frequently have to defend themselves. It seems therefore from every point of view that psychotherapy is of functional significance in all medicine and perhaps it is necessary for every age to re-appraise the role of psychotherapy in the light of its own particular needs.

The Objective and Subjective in Medicine:

It is the primary job of medicine to maintain the health of the individual and the community. One has only to attempt a scientific definition of health to be aware of its elusive qualities. Lewis (1953) attacks the idea of health as a social concept and argues against regarding illness as a social deviation or maladjustment. He gives the three traditional criteria of illness (physical and mental) as:

(1) The patient feels ill - a general subjective datum,

(2) He has disordered function of some part of him - a restricted objective datum,

(3) He has symptoms which conform to a recognisable clinical pattern - a typographical datum.

and he gives the criteria of health, besides subjective feelings and degree of total efficiency, as adequate

performance of functions, psychological and physiological. "So far as we cannot designate formal major functions of the human organism, and lack means for judging whether these work efficiently, we are handicapped in recognising health and illness in a reliable and valid way. The physiological functions can be thus designated and judged far more satisfactorily than the psychological. We can therefore usually tell whether an individual is physically healthy, but we cannot tell with the same confidence and consensus of many observers whether he is mentally healthy."

This is clearly a serious attempt to make a scientific definition, and although it could be challenged at several points, it will be sufficient here to note the pessimism arising from the frustration felt by the scientist in being unable to identify all his referents. And in two important places he is forced to use the word 'subjective' which all scientists distrust, though as Valentine (1955) points out in another but not unrelated context "In the last analysis we must accept the subjective; we cannot say that a person is not anxious simply because such responses as galvanic skin resistance, sudorific activity, and cardiovascular control remain stable. The individual's capacity to be aware of emotion may not be dependent on these peripheral events taking place."

It will be the task of this paper to enquire into the nature of the processes which may be brought to bear on

this subjective component of illness and health in the therapeutic situation. The relative power of the objective and subjective influence is well illustrated by an experiment of H.G. Wolff et al (1936) in a hypertensive patient. The blood pressure was measured continuously over a period of one hour. At the beginning of the hour the blood pressure was measured. After the first fifteen minutes had passed, a second doctor took over from the first doctor, and after a further fifteen minutes the blood pressure had dropped by some 60 points. Later, the first doctor returned and replaced the second doctor and the blood pressure steadily rose again to its former high level. The drop in blood pressure brought about by the presence of the second doctor was greater than that achieved by ½ gm. sodium amytal injected intravenosly on a subsequent occasion by the first doctor, a drop of 20 mm. only being obtained. Such a demonstration draws attention to two facts:

(a) Subjective are at least as powerful as objective factors.

(b) The need to investigate further the nature of the subjective factors.

The personal element apparently cannot be discounted. "What is 'good' medicine?" ask Szasz and Hollender (1956). Ideas in medicine change. A short time ago fever was thought to be a bad feature in an illness, and treatment was

directed towards lowering the temperature. Now fever is recognised as a by-product of a healthy reaction, and, in itself, it is largely ignored. As things are, practising physicians have widely differing philosophies and unconscious values and attitudes which colour their approach to patients. For that matter, the same is equally true of patients, and this often determines the kind of treatment which is finally decided upon. Is the problem, in a patient with a peptic ulcer, the same problem, whether seen by a surgeon, a physician, or a psychiatrist? Is it a local lesion, a malfunctioning system disease, or a stress disorder of the whole organism? What, under these circumstances, is 'good' medicine? Clearly, all aspects must be taken into account.

## Chapter 2.

## STRUCTURED ASPECTS OF THE PSYCHOTHERAPEUTIC SITUATION

Definition of Psychotherapy:

If we accept therefore, that psychotherapy is an integral part of general therapeutics, it would be well to have some definition of what it is. It is given variously by different authorities as "The treatment of disorders by psychological methods" (Drever, 1952). "The art of treating mental disease or disorder. Any measure, mental of physical, that favourably influences the mind or psyche. Usually however the term is applied to measures that are associated with the amelioration or removal of abnormal constituents of the mind" (Hinsie and Shatzley, 1953). These definitions are too wide for the purposes of the present paper and probably include more than is commonly meant by the term. For our purposes, divesting ourselves as far as possible from preconceived ideas and prejudices which abound in this field, we confine ourselves to a discription of what actually takes place in psychotherapy in such terms as an objective non participant observer would describe it - the so-called operational view. In psychoterapy, then, two people (or more in the case of group therapy, but only individual therapy will be dealt with here) meet together, one being a therapist, the other a patient, for a specific purpose, namely, the relief of the patient's

suffering. Communication between the participants is the exclusive means by which this goal is achieved - physical contact (aside from the routine medical examination) being proscribed, only psychological exchange being permitted. Psychotherapy can, and does exist without physical therapy but physical therapy is often, even usually, accompanied by psychotherapy, if any communication takes place between patient and therapist.

Historical background of the doctor-patient relationship in general medicine:

Although the word psychotherapy itself is comparatively new, the referents it denotes have in fact been an integral part of medicine since earliest times. "The medical historian" writes Riese (1956) "is challenged by some anticipations to be found in Hippocratic medicine. From certain passages of the Hippocratic collection (Epidemics I) the physician emerges not as a kind of self-sufficient director of treatment but as an associate of the patient - The art consists in three things - the disease, the patient, and the physician. The physician is the servant of the art and the patient must combat the disease along with the physician." Galdston (1953) also points out that 'therapon' denotes servant and it seems strange that this origin of the word therapeutics should be so little known or remarked. Riese goes on to claim that this involves the physician unavoidably in a process which consists

of reciprocal ways of influencing; it is not unidirectional. The older attitudes to disease reflect the development of medical thought. In earliest times disease emerged as an instantaneous affliction. It was Galen's greatest contribution to realize that the simple and haphazard accumulation of facts, apparently unrelated, could be logically consistent, and could form the natural history of disease. So the clinical history became almost the main line of approach by the physician and so successful was it, that it was given the rank of the first and most important step in treatment. In order to obtain the clinical history, the patient was interrogated; this became a key technical procedure. The moral nature of the contract between patient and physician changed its nature from the Hippocratic days and became a simple obligation to obey certain rules of conduct. This set the tone for the kind of doctor-patient relationship which has existed up to the present day. As the technical procedures have multiplied, the relationship tended to be neglected and it is only since the social sciences began to interest themselves in the phenomenon as an aspect of society that attention has once more been drawn to it, and some useful observations made, though astute clinicians of every day and age have been aware of its existence - witness Gower's epigram that if every drug in the world were abolished the physician would still be a

useful member of society and Houston (1938) along similar lines indicated that the doctor himself was a potent therapeutic influence, a view strongly maintained today by many psychiatrists (e.g. Bennett, 1953, Batchelor, 1953).

However a more intense consideration of this specific relationship was inaugurated in modern times by Henderson (1936) who refers to the physician and patient as a social system. A science of human relations hardly exists at present, he says; it is still in the empirical stage, perhaps even pre-empirical, intuitive. Nevertheless the intuitive qualities, perceptions, and sensibilities, if well developed, can be productive of patterns of behaviour which are "beautiful" - a lush word to use in a scientific paper and Henderson is certainly not afraid of emotion. Here we are now almost in the realm of the Art of medicine and this aspect will be considered later. However in passing, it is clear that this is a most valuable contribution which the physician makes - consider for example Kingsley Martin's delicate tribute to Joan Malleson (1956).

However, Henderson argues, if this achievement of some physicians, this knowledge that they have, is to be transmitted effectively, the necessary condition would seem to be a scientific formulation, some kind of theory, working hypothesis, or conceptual scheme which can be taught, passed on or handed down. Like all others concerned with the behavioural

sciences he looks at the exact sciences and longs for the predictive accuracy attained by them. When Galileo wrote "Dialogues on Two New Sciences" he opened up new fields of knowledge from which the edifice of modern science has grown. Yet, at approximately the same time in history, Machiavelli was reflecting on the influence of the sentiments on the actions of men, and, through these actions, on the fate of human society. Yet comparatively few developments have arisen from this. It may be that this is a much more difficult field in which to control all the variables, but the impact of technology and automation on our lives have brought a new urgency to the problems they pose (M.R.C., 1947, Stewart, 1948, Ling 1954, Maule 1956, Sykes 1956). Turning to the sciences for a model, Henderson finds a definition by Willard Gibbs "a physico-chemical system is made up of components which exist in phases either solid liquid or gaseous". He compares this with Pareto's generalized social system where heterogeneity of people (Pareto 1940) suggests these differences between solids liquids and gases. People have sentiments, economical interests and use language. Two people form a social system. They are heterogeneous - they have, and are moved by sentiments, interest, talk. From this he derives a theorem - in any social system, the sentiments, and the interactions of the sentiments, are likely to be the most important phenomena. A recent survey of the role of

the passions in science by Polanyi (1956) supports the validity of this statement, and we will return to it later.

Doctor-Patient Relationship in Psychotherapy:

The doctor-patient relationship has been discussed so far in its widest application, i.e. in "organic" medicine. Talcott Parsons (1952) goes into the matter more fully, devoting special consideration to psychological illness. In attemtping to take a sociological perspective of illness and the role of the physician, he examines the social setting in which the "technology" is applied, and he draws attention to the fact that even in organic medicine psychological components are never absent, not a new fact of course, but one that needs to be repeated again and again as it is almost impossible to overemphasize its ubiquity as a contaminant of clinical therapeutic investigation. Parsons sees illness as a part of motivational balance in the social system, and so also is therapy - a view shared by Skinner (1953). Illness can be considered as deviant behaviour, that is to say, it is not the expected role, the sick person being disabled from fulfilling his obligations. The components of this part of the social system may be classified as follows:

(a) Genesis of illness as motivation.

(b) Role of the sick person as a social role.

(c) The role of the physician as part of therapy.

(d) The way in which both roles fit into the social system as a whole.

Although in some respects all these factors are interdependent, yet we will limit ourselves here since our concern here is the theraputic relationship, to a description of the role of the physician as part of therapy. His role is restricted to matters of health, he observes an impersonal "matter of fact" attitude without personal emotional involvement, he justifies and legitimises his refusal to reciprocate his patient's deviant expectations. The prestige of the physician's scientific training and his reputation for technical competence, give authority to his approval, and form a basis for the acceptance of his interpretations. In psychotherapy there may be said to be four conditions of the role:

(1) "support" - a solidary group is formed by doctor and patient and the emphasis is on the welfare of the patient.

(2) Special permissiveness - but this permissiveness is restricted to gestural and verbal levels - "acting out" is not generally permissible.

(3) Refusal to reciprocate:- the patient's wishes are not freely and uncritically met, his aggression however is not reciprocated, equally, his attempts to "seduce" the therapist are pointed out and resisted.

(4) Conditional manipulation of sanctions:- the giving and withholding of approval is essential

to the effectiveness of psychotherapeutic interpretations.

So, therefore:-

(A) A deliberate "conscious" psychotherapy is only part of the therapeutic process. The roles of doctor and patient were created in Western society before psychiatry and were not created as an application of the theories of psychiatrists.

(B) The analogy of the iceberg is again appropriate - the upper obvious but small part is conscious intellectual psychotherapy, the other larger more significant component is the unconscious relationship.

Unfortunately, though much has been written from the professional standpoint, little enough has been heard of the patient's interpretation of his role. The great importance of the patient's feelings is tacitly admitted by the profession, in their insistence wherever possible, of the historic freedom of the patient to choose his own medical attendant. One attempt to express the patient's requirements has been made by Lederer (1952) who stresses the need for an unambiguous description of therapy, the rationale behind it, and avoidance of vagueness over details. Unnecessary repetition of diagnostic examinations and tests should be avoided, because any signs of insecurity or indecision shown by

the physician augment the patient's apprehension. When the doctor demonstrates his skill by his determination and decisiveness the patient is usually grateful for such reassurance; then he is sure he is in trustworthy hands. There is much wisdom in the old medical dictum "in any contact between doctor and patient, there is only room for one anxious person - the patient". Some of the art of interviewing rests in the doctor's recognition of unconscious distortions brought about by the patient's anxieties and defences. If the doctor behaves like a detective in pursuing facts, the patient is made even more tense. Equally so, apathy is a common response to an over-protective attitude. Barraclough (1937), Stanfield (1947), Jensen (1948) have shown how hypochondriasis, crippling and lifelong, can arise as a result of mismanagement of the acute illness. In some important ways of course, the patient's attitude to the physician is that of a child to its father, and the patient's role in the family is related to his role in society, (Parsons 1952 b). The situation of the sick individual is that he is helpless and is certainly in need of help. He is technically incompetent to deal with his illness himself and he has to choose a physician on whom he may place his burdens. He is especially liable to emotional involvement with the physician, partly due to the shock of being ill, his anxiety as to the future, and his association of the doctor with death (Parsons, 1951).

Conversely, the patient is buttressed by his knowledge that exploitation of the sick is unthinkable, and his confidence in the solidarity of his family, where the healthy members accept liability for the sick; but on the other hand, at this time he is specially liable to irrational and non-rational beliefs.

There are therefore many social and cultural and historic features operating when a patient and physician meet together professionally. They each obey certain laws of conduct appropriate to their situation or role. Each have expectations and obligations many of which are rarely verbalized. Relationship therapy takes into account these constructs with a view to their better understanding and their more effective use in treatment.

## Chapter 3.

## TECHNICAL PROCEDURES IN PSYCHOTHERAPY

### Sullivan's Interpersonal Situation:

The reawakening of interest in the physician - patient relationship in psychotherapy is largely due to the work and teaching of Sullivan (Sullivan 1945, 1953, 1954). As is now well known, he sees psychiatry as a study of interpersonal relationships and the therapist's position as a participant observer is underlined. Sullivan is a neo-Freudian whose approach seems to be acceptable to the spirit of the times. The participant observer role of the therapist in his system marks a great change from the unseen detached observer whose main function was to act as a target for the transference of the patient in classical psychoanalysis. Broadly his theory is that mental disorders are to be regarded as distortions of interpersonal processes and the insight into, and recognition of these distortions can only be achieved by one who is experiencing these distortions in his association with the patient, and who has had the necessary training to recognise them. The dynamisms of his theory are nowhere stated clearly but by and large they are those of psychoanalysis. The approach is of course biographical and genealogical. No compunction is felt over using such terms as education and re-education - indeed the whole process of treatment could be understood as a refined

and subtle educational technique (Sullivan 1945, Ozarin 1954). Sullivan's primary discipline was that of psychiatry where he used not only the techniques of psychoanalysis, but he also drew heavily on the tenets of social psychology and he chose to view behaviour in terms of field theory (Murphy and Cattell, 1952). As a result he was closely associated with social scientists in problems of communication, and if a compressed definition of Sullivan's theory were attempted it would read something like this - Psychiatry is the study and treatment of mental disorders, which are themselves disturbances in interpersonal relationships rising through distortions of communication in the social setting.

Sullivan's ideas stimulated investigation of the kind of relationship which exists between patient and therapist in other types of therapy, and Fiedler has been able to show, with statistical backing, that whether the practitioner follows Adlerian, psychoanalytic or non-directive techniques, relationship is therapy - the goodness of the therapy is a function of the goodness of the relationship. Non therapists and naive subjects were able to describe the ideal therapeutic relationship in fairly accurate terms and the most important dimension which differentiated expert from non-expert in all these schools was the ability to understand, communicate with, and maintain rapport with the patient (Fiedler, 1950 a, 1950 b).

The term Relationship Therapy as used in this paper will refer to the kind of relationship which exists between patient and physician in Sullivan's system. Sullivan is quite forthright in the claims he makes (The Interpersonal Theory of Psychiatry p. 13). He gives three definitions of psychiatry. The first one is that psychiatry is a formless conglomeration of ideas and impressions, magic,mysticism,,conceits, and empty verbalisms. This kind of psychiatry he believes to be quite widely practised. The second definition, one to which he owed allegiance for a long time, set up psychiatry as an art, the art of observing and perhaps influencing the course of mental disorders. "The third definition of psychiatry, which is the one relevant here, may be approached by considering it as an expanding science concerned with the kinds of events or processes in which the psychiatrist participates while he is being an observant psychiatrist. The knowledge which is organised in psychiatry as a science is not derived from anything special about the data with which the psychiatrist deals. It arises, not from a special kind of data but from the characteristic actions or operations in which the psychiatrist participates..... But of all the actions or operations in which the psychiatrist participates as a psychiatrist, the ones which are scientifically important are those which are accompanied by conceptual schematizations or intelligent formulations which are communicable. These, in turn, are those actions or/

operations which are relatively precise and explicit - with nothing significant left equivocal or ambiguous." In spite of a certain abstruseness of language, this is a straightforward statement claiming scientific status for this particular brand of psychiatry.

Vicissitudes of the Relationship:

The principles of war are plain enough, said Napoleon, it is their application which is difficult. However the history of psychotherapy shows few signs of unanimity of principle, though it is probably more true today that broad areas of agreement have been reached by most of the schools, even though individual application continues to be diverse. Recent investigations show that good practitioners of all schools operate similarly (Schoben, E.J., 1949). The physician-patient relationship however has had many vicissitudes in the past. The patient's role was quite passive and the physician's quite active when Mesmer was transferring his animal magnetism. The activity-passivity balance or rather imbalance reached its zenith when Charcot's hypnotic technique was being widely practised. Along with hypnosis strong support and suggestion were used - though suggestion and support are probably omnipresent in every meeting between a patient and a professional helper.

In his iconoclastic way, Freud brought the role of the physician to a pitch of passivity never seen before and

left the structuring of the relationship almost entirely to the patient. The therapist became a shadowy, unseen figure who intruded as little as he could into the phantasies of the patient, and when he did so, his words as often as not were colourless, detached, certainly non-directive. So was born the transference, the transference neurosis and the counter-transference. The analysis of the transference was held, at one point in psychoanalysis, to be the keystone of the cure. But then, as pointed out a little later, so at various other times were repression, abreaction, free association.

Now, with reaction following revolution, as is its wont, we are back in an era where the physician is once again participating in a more active way with the patient (Horney 1951, Sullivan 1953). Appel (1954) has pointed out that there are times when the classic psychoanalytic virtues of impersonality, objectivity, and neutrality are inappropriate, even sometimes cruel. The exploratory analytical approach has been humanised, recapturing some of the elements of support and suggestion (it is practically impossible to keep any structured situation of psychotherapy free of these forces) but they are brought openly into consciousness when they are felt to be operating. This new role of the therapist is linked with various theories currently holding prominence in different

fields of knowledge (e.g. relativity theory in physics - but this will be further examined in Chapter 5). Thus, says Appel, the patient and therapist are partners in therapy and explore the realms of phantasy, imagination, impulse, feeling, and emotion; and the physiological, skeletal, and visceral responses and activities which follow or accompany these experiences. The doctor supports the patient by his presence, interest, kindly questions, togetherness; he shares and identifies with his sufferings. The therapist with his attentions, attitudes and words, attempts to repeat the conditions of normal, wholesome development of the child. As a thoroughgoing environmentalist he argues that experience produced the illness, therefore new experiences are necessary for the patient. So a moderately intense relationship is welcomed,in probably a shorter time than would occur in psychoanalysis and it is the job of the therapist to make explicit all the nuances and refinements of the relationship. Sometimes, he says, the doctor-patient individuality is lost as one might lose oneself in listening to a Bach passacaglia. Psychotherapy of this kind is creative, allied to aesthetic experience. The movement does not proceed basically by intellectual reasoning and logical discussion. It may not be possible to make people rational but it is possible to help their growth into rationality. At first sight such a view seems

extreme and, couched in this language, it suggests mystique too nakedly for the present day mechanistic taste.

Yet, approaching the subject from the opposite direction, Stanton (1954), notes that the detachment of the psychiatrist may lead to detachment in other personnel and in patients. When Kraepelin demonstrated "Absence of affect" by sticking a pin into a schizophrenic patient's nose, he was also demonstrating that such an action would produce emotional blocking.

Transactions:

As to conducting the actual interview Sullivan lays emphasis on the face to face situation. He values gesture and the observation and understanding of gesture as an aid to knowledge of the patient. "The facts are that we cannot make any sense of the motor movements of another person except on the basis of meaningful behaviour that we have experienced or seen done under circumstances in which its purpose or at least the intentions behind it were communicated to us." (White 1952, p. 121). Tonal variations of voice are also noted as significant indicators of covert emotion. He did not hesitate to interrogate, especially with obsessionals, for he felt it was good for them to see that their doctor was taking a careful and keen scrutiny of his proper material, just as they would have done. He did not disdain the use of emotional expression

when he wished to caution a patient against a certain course of action, without having to put into words his reasons; or to feign astonishment or surprise in order to lead the patient on to a more detailed recital. In general, he controlled the therapeutic situation by movements, questions, and minimal interpretation. He considered it mandatory with schizophrenic and obsessional patients to give positive recognition of a forward move on their part. Silence, at this time, he felt to be unforgivable; and he laid great stress on the expert-client context of the relationship.

His debt to the social sciences was always acknowledged, pointing up various expectancies and pressures and "sets" which exist in our culture. The social scientists have also explored the physician-patient relationship and the roles of the sick individual and the doctor in the community (Talcott Parsons, 1951). Successful performance in treatment depends on conditions which are not obvious, and treatment of an intellectual kind or by applied science is not to be taken for granted....., says Parsons. For example, there are such unexplored components as the belief in the efficacy of measures, the motivational balance of the social system, including sickness as deviant behaviour, and perhaps most important for the psychiatrist, his deliberate and conditional manipulation of sanctions and rewards, his status in a professional role of a specialized type and the prominence of a scientific

knowledge of psychological processes, and scientific objectivity. The process that thus takes place has been studied by Spiegel (1954), and he gives it the name of transaction - a term first used by Dewey and Bentley (1949) to describe reciprocal reverberating processes which occur in any system of action or behaviour. It is two-way and self-regulatory (like neuro-humeral control of the organism). Transaction is compared and contrasted with self-action and interaction (as when one billiard ball forcibly alters direction as a result of the impact of another billiard ball). Transaction between physician and patient means adjustment, and is mediated by communication. The exchange consists primarily of the patient's statements and the doctor's interpretations which reveal the motivations of the patient, the assumption being that the patient transfers to the doctor attitudes and feelings derived from experiences with significant figures in the past. Transference fails to be the sole mechanism for locating disequilibrium on two counts (1) it is abstract and does not differentiate old and new factors and (2) the therapist's involvement is ignored - his nuances of interpretation, the richness of detail, the multiple choice of responses he makes.

The Role of the Patient:

Another important mechanism is the social role. Role is (1) a descriptive term for a pattern of behaviour, but it is also (2) governed by motivational processes and by

cultural value orientations. An example is given by Spiegel of a Jew and an Englishman, who were patients of his. Both wanted to enlist sympathy, but played different parts - over-emotional in the former case and over-restrained in the latter - because of different cultural value orientations. Role playing as a system of communications has its own homeostatic regulating mechanism - the complementarity of the roles (Nieman and Hughes, 1951). The doctor can assume or decline the role assigned to him. The management of the transference then becomes a matter of refusing to play the roles assigned to him by the emerging implicit roles of the patient, so the role and its motivation is forced explicitly into the consciousness of the patient by the disequilibrium. In psychotherapy, because of the great disequilibrium, the doctor cannot refuse to play a role reciprocal to the dominant explicit role of the patient. By re-establishing complementarity, disturbance is avoided. But care must be taken that implicit roles are not suppressed (Spiegel, 1954); for example, it is too easy by giving facile reassurance to let the patient become an "appreciator". However, the patient can be put on more secure ground so that the discovery can be made more easily later.

Now this may be regarded as abstraction of the highest order. The concept of social role is well established but some of the other mechanisms are speculations

which may or may not be valid. Still they serve as useful enough hypotheses on which a Sullivanian type of therapy may be assayed.

The Dynamics of the Cure:

Some have believed that little more than a satisfactory association between doctor and patient is necessary for a cure. For example, Rogers lays stress on a warm, democratic, receptive hearer who permits the patient to express himself. No doubt a sympathetic and patient hearing is very good for everyone's self-respect, or at least for those who are still not ill enough to have passed beyond the realm of interpersonal relationships (Rogers, 1939). But as Masserman points out (1955) evidence is now accumulating that a false sense of security can be developed in this protective environment so that when disappointment is met with in the real world again, his anxieties increase tenfold. Rogers believes that the self, if allowed to express itself completely, could, in a comparatively short space of time, initiate a spontaneous growth leading to a mystical goal which he calls self-realization. This is in fact the goal of non-directive therapy though it is specifically a therapy without a goal. In fact, non-directive therapy is inconceivable - it is, as all life is, goal-directed (Humphrey 1951, p. 9).

Latter day psychoanalysts have not been uninfluenced by this change in the current climate of psychotherapy. Indeed one might remark that this sensitivity to happenings in fields related to it is one of the enduring characteristics of psychoanalysis. They now believe that the physician-patient relationship consists of conscious and unconscious events in both individuals whose specific description requires great detail if the dynamic and psychophysiological effects are to be elucidated (Margolin, 1954). Psychotherapy is the influencing, therapeutically, of one individual by another, by psychological means. In non-psychiatric work this is unplanned and has often been referred to as the art of medicine which transcends description and can neither be taught or learned. It is intuitively apprehended as a character trait in a given physician and is often unrelated to systematic knowledge. Margolin goes on to equate this with superficial psychotherapy, with kindness and support given in an atmosphere of omniscience.

I propose to take exception to this description of superficial psychotherapy later on in this paper but for the present his conclusion should be noted; viz, that the art of medicine consists of empathy, the sense of timing in speech and action, and a tolerance for the irrational; and that this art can be learned and taught in terms of superficial psychotherapy. In passing one is to a certain extent

surprised by the devious argument whereby the art of medicine is given importance, examined at some length, dismissed as unlearnable and unteachable and then, after discussing technical intellectual manoeuvres (such as the mechanisms of anaclitic therapy), it is revived as superficial psychotherapy and declared as such to be capable of being taught and learned in terms of such concepts.

A more careful statement of representative analytic thought on this topic is given by Galdston (1953). Offering of direction and suggestion by the therapist is not precluded if it favours expeditiousness (though this has to be carefully distinguished from the moral busybodyness to which Freud objected). The operational sequence is given as follows:

1. The patient should be encouraged to formulate and express his complaint.
2. During the recitation and recall the therapist acts as an echo but suggests new contexts and new meanings.
3. Reassessment and reorganization of the anamnestic material, i.e. the remembered material must be seen anew. "The terms interpretation and insight are applied to this process, but these are somewhat neutral designations. They do not reflect the powerful operations of that force which derives from what the therapist stands for.

But the patient cannot gain recovery and derive effective therapy solely from the contemplation - no matter how deep and detailed - of his past experiences. For these ends he requires certain new experiences which in a measure are derived from the actual person-to-person relationship of patient and therapist."

4. The final step is in implementing, motivating and acting on the therapeutic gain - the dissolving of the transference.

Galdston concludes that it is important to the scientifically guided to work within a framework, defined and theoretical, which however should be used as a supporting scaffold and not an imprisoning cage; because man the therapist avails and prevails. Brill said "The most important factor in therapy is the therapist".

Further Sociological Perspectives:

A subtle grouping of this kind offers a challenge to the cultural anthropologist, to differentiate the principles governing such a system. It is notoriously more difficult for them to reach conclusions concerning a society in which they are involved, than it is when a simpler society is being evaluated. However the analysis of Talcott Parsons has

already been indicated in Chapter 2 (Talcott Parsons, 1951). But although this relationship, as he describes it, is powerful, important, and crucial, it is disappointing that so little of it can be put into words, for a proper understanding to be achieved: but the outlines remain blurred and vague; terms are used whose meaning is not clear and without proper definition. Such a formulation, be it ever so helpful to a better understanding, is bound to be greeted with some suspicion in a scientifically oriented discipline such as medicine is now. In fact twenty years ago Henderson was giving as good a description of the process as anything we have had since, though the phraseology of McDougall gives it a curious quality of remoteness, so fast does the language of psychology change. Henderson's theorem was: in any social system the sentiments and the interactions of the sentiments are likely to be the most important phenomena. The physician should see to it, and regard it as a rule of conduct, that the patients sentiments do not act upon his sentiments, and above all do not thereby modify his behaviour; and he should endeavour to act upon the patient's sentiments according to a well conceived plan. This is an application of science to the practice of medicine just as much as physics or chemistry or biology. The doctor must be interested, he must make no value judgments except praise for insight, he must not argue against the patient's prejudices for logic will not avail

(cf. Elton Mayo, 1933). In order to modify the patient's sentiments the logical analysis must somehow be transformed into the appropriate realignment of attitudes. But sentiments are relatively resistant to change; therefore, some part of the sentiments which the patient already has must be used to modify his subjective attitude. In talking to patients one must therefore (1) listen for what he wants to tell, (2) for what he does not want to tell, (3) for what he cannot tell. This refers to whether the patient has strong negative or positive feelings; to areas which he feels to be safe or dangerous; and to his implicit assumptions.

In using any theory it is well to remember Poincare's judicious and sceptical remark "These two propositions 'the external world exists' or 'it is more convenient to suppose that it exists' have one and the same meaning." It is necessary to take care of what one says to a patient because of one's own arbitrary assumptions. Bare statements of reason or logic are to be feared, often the principal effect is an emotional one (as when a judge passes a sentence of death). It is meaningless to speak of the truth, the whole truth, and nothing but the truth. Sometimes the truth produces psychosomatic or other unpleasant and harmful reactions. Nothing is more

effective in arousing in a patient the belief that one is concerned wholeheartedly and exclusively with his welfare. These realisations serve to increase markedly the moral responsibility of the physician.

Now all this is probably admirably practical, but it cannot escape the charge of being piecemeal. These directives display faith in the empirical validity of the methods described (though not actual figures are quoted). But the pretence that they have a scientific basis must be investigated. An ardent desire is evident for an exact formulation, and the sources of such scientific validity seem to be psychoanalysis, social psychology and communication theory. Examination of these claims will now be taken up.

## PART II.

## THE DOCTOR-PATIENT RELATIONSHIP AS SCIENCE AND AS ART

### Chapter 4.

### PSYCHOTHERAPY AND SCIENCE

Historical note:

Sullivan drew heavily from the principles of psychoanalysis and any consideration of his work must take this into account (Thompson, 1952) as it formed a great part of the scientific basis of his psychiatry. Volumes have already been written on the standing of psychoanalysis as a science, and it would be presumptuous to attempt any short re-evaluation. However since this is Freud's centenary year, there has been a certain amount of accounting and a tendency to reappraise the constructs of his method.

In the hundred years from Pinel to Freud, psychiatry did not have to concern itself unduly over its scientific authenticity. Esquirol, Tuke, and Connolly, for example, cheerfully practised their Moral Treatment of the Insane and fought their battles in the sphere of ethics rather than in the sphre of intellect. However, towards the end of the nineteenth century, when many other branches of medicine were making great technical advances - anaesthetics, bacteriology, surgery, to name but a few - psychiatry began to lag. In the optimism engendered by their faith in logical postivism,

supported by undoubted and demonstrable progress in the understanding and control of disease, medical men were hardly ready to listen to anything that smacked of the mystical (Freud, 1949 a, p. 250). Meynert who was Freud's teacher in neurology, stated quite bluntly that psychiatry was not and could not be a science till it could be shown to rest on definite laws of neuro-physiology. In this atmosphere the young Freud found himself challenged over and over again in his chosen field of psychotherapy. Charcot was not altogether above suspicion in schools where adherence to rigid principles was valued, and not so very far away in time were the unpleasant memories of Mesmer and Gall. The scientists were determined to avoid being made to look foolish in the same way again. So, when Freud gave an early paper to the Vienna Neurological Society under the chairmanship of Kraft-Ebbing, he was given an icy reception (Collected Papers, I, p. 303). He presented his discoveries as ordinary contributions to science and found that others could not accept them as such. From then on he laboured to make his theories scientifically acceptable using clinical evidence to support his hypotheses. It is safe enough to presume that Freud in all his greatness was still the victim, to some extent, of the times in which he lived and of his own experiences.

In his determination to be scientific, Freud was aided in a very material way from the Burgholzli at Zurich, by Jung, whose Association experiments were directly connected with the experimental psychology of the meticulous William Wundt, whose scientific standing was above question. Jung declared that psychoanalysis was a valid method of treating certain psychical phenomena. "The association experiments started by the Wundt School had been interpreted by them (the Swiss) in a psychoanalytic sense, and had proved applicable in unexpected ways. By this means it had been possible to arrive at rapid experimental confirmation of psychoanalytic observations and to demonstrate to students certain connections which the analyst would only have been able to describe to them. The first bridge linking up experimental psychology with psychoanalysis had been constructed" (ibid., p. 311). This was in 1907 and from then on recognition quickly followed in high places. His confidence increased and by 1917 he had reached the point where he could declare in the New Introductory Lectures that a new science had been established (ibid., p. 84) - and psychotherapy by analysis was the method by which the benefits of the new discovery could be made manifest. From the standpoint of the present, Learning Theory would readily appreciate, because of the prevailing intellectual climate of the era, and because of the intensive emotional conditioning of his early

professional experiences, that Psychoanalysis as an emergent doctrine had perforce to be "scientific".

From the appearance of the Introductory Lectures, psychoanalysis set out to be a rigorous discipline based on a set of laws, and it managed to retain the interest of many, inside of medicine and out, who applied assiduous criticism to it, though it would be fair to say equally, that many remained sceptical and unconvinced. However there can be no doubt that of all the types of psychotherapy so far produced, Freud's has come nearest to satisfying the demands of scientific requirements, and his was the most powerful and determined effort to raise psychotherapy to the status of a science. When J.C. Flugel's paper on psychoanalysis appeared in the science section of the Outline of Modern Knowledge (1921), psychoanalysts might well have felt that the ultimate goal had been reached.

Some Demurrers:

However opinions differ as to what may be expected from operations dealing with such complex and partly known variables as human personalities. "It is only in the sciences dealing with inanimate matter that a reasonably adequate set of primary concepts has yet been isolated" (J.W.N. Sullivan, 1933).

A science may pass through three stages:

(a) The loosely co-ordinated knowledge acquired, transmitted, and tested over countless generations, which we call common sense.

(b) The systematic formulation of these common notions as a classical system covering, and accounting for, a large range of ordinary experience.

(c) Further critical elaboration, calling for new concepts.

This has happened in the two most exemplary sciences - geometry and physics (Birks, 1956). In the latter, stage two belonged to Newton and stage three to atomic physics. Freud has been called the Newton of the mind, but the question is - whether in fact stage two has been reached? Psychoanalysis presents a genetic dynamic model of human personality. The main assumptions are about the genesis of mental processes and the forces involved in them. There must be a theory and a law to describe the phenomenon and we must be able to obtain from the theory a prediction - if the event duly arrives, we regard the hypothesis as confirmed (Hutten, 1956). "We must also indicate", he goes on, "a theoretical method and if possible a practical procedure showing us what sort of things we are to accept as evidence. " This is true for every science including physics. Yet when we give such rules to psychology we find that many people raise very vigorous objections (E. Pumpian-Mendlin, 1956). "Take again the question of overdetermination", says Hutten. "Psychological and in particular psychoanalytic explanations

involve overdetermination; they are often regarded as problematic. We have a multiplicity of explanations instead of a single one. And it may sometimes appear as if two such explanations were contradictory. This disagrees from the ordinary causal explanation as we know it from physics. Nevertheless, it may be difficult in practice to judge an overdeterministic hypothesis; but it is I think justified to say that overdetermination is accessible - at least in principle - to observation and experiment. For the evidence supporting such a hypothesis is incomplete in exactly the same sense in which this is always true, namely that new data may be found which do, or do not confirm it. We tend to forget that nature does not provide us with ready made data for every hypothesis we care to invent." In similar vein Walker (1956), arguing on homeostasis concludes that Freud's hypothesis makes sense in the language of psychology, neurology, and cybernetics, but it is curiously hard to extract confirmation of it from any of these sciences.

A celebrated older and rather bitter criticism came from Wohlegemuth (1923). "Experimental psychologists have been trained to walk warily; they know that in their science the pitfalls are more numerous than in any other of the natural sciences". Every experiment has to be carefully scrutinized and the conditions closely watched (p. 245). He then likens the emotive force of suggestion in experimental

psychology to bacterial contamination in surgery. He finds that the experimental psychologist eschews suggestion and pursues objectivity while the psychoanalyst makes abundant use of it. "The best that can be said for them, is, that not one really understands what is meant by suggestion. The least of their confusion is to mistake for it the means employed in producing it. In competent scientific circles psychoanalysis has fallen absolutely flat. Nowhere in the whole of Freud's writings is there a shred of proof; only assertions of having proved something before, but which was neverdone, and mysterious references to inaccessible and unpublished results of psychoanalysis. Almost complete ignorance is manifested everywhere of the literature and the results of modern psychology, of experimental method and logic."

When psychology broke from philosophy it was free to advance. It moved away from the sterility of speculation into the light of investigation and observation. But the move was not an unmixed blessing for psychology tended to forget the need to clarify its fundamental postulates. The need to think through fundamental premises and method in their logical and epistemological implications should be recognised as a safeguard against any tragic repetitions of mesmerism and phrenology." "The history of magic and experimental science reveals a tendency for each successive phase of culture to maintain something comparable to a blind spot for

its cults and most characteristic errors. Psychoanalysis illustrates this phenomenon. Much of the popularity of the method has derived from the fact that it has borrowed heavily from the terminology of physics and such pseudoscientific psychologies as the Herbartian, and that from the beginning it has hidden behind the aegis of science" (Johnson, 1948). Yet the tenacity of the orthodox Freudian school has remained a source of wonder. It has maintained its appeal in spite of what would seem to be devastating attacks. Johnson ascribes the persistence to the timing of its birth. "At the beginning of the twentieth century the educated European was in a frame of mind that would accept any doctrine of human nature - no matter how fantastic, no matter how destructive of human values. As in a long military campaign, Man's cosmological complacency had suffered a series of setbacks from Copernicus down to Darwin. It would have been extremely hazardous for him to deny categorically any doctrine whatsoever, which tended to devalue human nature, merely because such a doctrine was repellent, and even bizarre" (ibid).

Yet beneath the outer trappings of dogmatism, unverified speculation, bias, and cultism, there are some central principles which have stood the test of time and are, or seem to be, well on the way to becoming clinically validated. The faithful say that with all its failings the

method still holds the best promise for the understanding and treatment of personality disorders. However many have felt the need to reformulate some, if not many, of its constructs, and restate its procedures in more truly scientific terms, (Ellis 1950). "Before starting another critique of, and substitute set of principles for the original and still widely held theories..... it would be impertinent to assume at the start that psychoanalysis must be scientifically based and oriented. Jung is anti-scientific at times and has contended that there are more things to analysis than are dreamed of in scientific ideologies." (ibid.).

Present Status of Psychotherapy:

Two other systems of psychology have given rise to fresh thinking in psychotherapy. Both have at least the security of resting on the experimental method and neither makes a claim till the result has been demonstrated repeatedly. I refer to the work of Hull (1946) and Pavlov (1942). The main exponents of the application of their principles to psychotherapy are Dollard and Miller (1952) on the one hand and Salter (1952) on the other). But such systems are at present incomplete. Dollard and Miller draw heavily on analytic concepts and procedure but Salter is so polemically prejudiced against psychoanalysis that his objectivity has disappeared. To some extent both are intimately concerned with the application of learning theory, and as this is probably the dominant school of psychology and the one for which it is

easiest to adduce experimental proof of its hypothesis, they may well establish themselves in the future. They are to be seen as essentially the same approach (the behaviourist) with only a differential emphasis. The work of Wolpe (1954) is impressive evidence of the usefulness of a technique of negative conditioning and if his results could be repeated on a wide scale by different workers then clearly psychiatry would have to take serious cognisance of the fact. Meanwhile the evidence is no more than suggestive and the definitive work waits to be done. There remains however the suspicion that behaviourist schools if too "pure" in method are liable to make the mistake of treating symptoms rather than treating causes which must, one presumes, always be unsatisfying to the mind of man.

As to psychoanalysis itself, now, in Freud's centenary year, the counter-reaction, never entirely quiescent, seems to be gaining ground. Eysenck (1952) has already published statistical evidence that all psychotherapy, is not only useless but actively harmful, in that patients who received psychotherapy took longer to recover than patients who received no treatment at all. His method of selection and case material are of course open to criticism. Of all the many reports and papers on patients treated by psychotherapy, he chose six which happened to give him unfavourable results. Eysenck's position contra-analysis is of course well known, and apposite to this the role of emotion

and controversy in science will be considered later.

But other uncertainties within the movement of analysis itself betray a certain disorder which casts doubt on its validity as a whole. Thus, in a description of the dynamics of the cure, we read the following statements (1) repression is the centre of psychoanalysis (Freud 1935, p. ), (2) free association is the corner stone of the process (Zilboorg 1952), (3) the cure embraces an adequate plan for modifying the patient's life performance and his ability to deal with problems, and he must be given tools and a set of instructions as to how to use them (Rado 1953).

During the centenary celebrations last summer the frank admission was freely heard that psychoanalysis had failed as a technique useful to medicine. Freud's discoveries were profound and significant certainly, and have influenced, and are likely to go on influencing human thought in all its diversities, but withal his system is less than a science and even its practical application is in doubt. The Lancet (1956, i, p. 617), to return to practical medical considerations, points out that no one has succeeded in amassing statistical evidence that psychoanalysis is more effective in the treatment of the various disorders of the personality than any other method.

As a general indication of how the mid-twentieth century evaluates psychotherapy, it should be noted that in

the latest edition of the Outline of Modern Knowledge (1956) - the publication which in 1921 had boldly placed Flugel's article on psychoanalysis in its science section - today omits any paper on this subject and perhaps significantly includes a Jungian article on psychotherapy in the section devoted to religion. If, then, the interpersonal psychiatry of Sullivan claims scientific status because of its basis in psychoanalysis, we have to admit, it seems, that the claim is hardly a very sound one.

## Chapter 5.

## SCIENTIFIC TRUTH AND POETIC TRUTH

### The old and the new in science:

In the scientific age, words have come to be regarded with suspicion and wherever possible, other symbols tend to be used. Observations of an empirical nature come to be scored in terms of numerical values so that the laws of mathematical prediction and probability can be applied. This has been so successful in removing false claims and false beliefs, that speculation and the Hegelian dream of understanding the whole universe by the use of pure reasoning powers have fallen into disrepute so that the only acceptable method of establishing a new fact is to design an experiment to test a hypothesis and see if it is empirically borne out. The logical positivists thought for a long time that eventually all that could be known would be known through this method - and in their more optimistic moods they in fact hinted that one day we would know everything. Complex situations were to be investigated, broken down into their constituent parts, the characteristics of the simpler parts could then be more easily understood, and the complexity then became simply the sum of the constituent parts. The method is essentially a reductive analytic one and is also known as

the molecular approach or reductionism (Sloan 1945). But Einstein and his relativity theory introduced such new and revolutionary thinking (though even this can be challenged when looking at the history of human knowledge) that what was fast becoming a new tyranny - in place of the old tyranny of religion, the new tyranny of Newtonian science - began to weaken. Science has now become not merely the passive observation of events; it is understanding events so as to predict and control them wherever possible according to our purposes. Planck's Quantum Theory and Heisenberg's Uncertainty Principle, as well as Einstein's Relativity Theory have revolutionised physical world concepts. Purely materialistic mechanism does not provide an elementary trace of the organic unity of system, or the capacity of systems to select, modify, or metamorphose at the nuclear level into other systems.

The Limitations of Scientific knowledge:

In the atomic age, of which we find ourselves a part, the last few decades have seen a weakening in the position of logical positivism, and Newtonian physics begin to yield to the insistent claims of an emergent relativity theory as the dominant new philosophy of science. Simple cause and effect mechanisms can no longer be held to be sufficient explanation for phenomena. Yet the habits of thought persist, which served so well for two hundred years.

Unitary or binary causation has been and is sedulously sought after, and the law of economy adhered to in scientific thought. The field workers are slow to appreciate the changed conditions, and this is especially true in the social sciences (Langmuir, 1943).

Such an upheaval in a fundamental science like physics naturally had its repercussions and reverberations in many other divisions of knowledge. If simple cause and effect was no longer tenable, how was order in our knowledge, so painfully won, to be restored? If simple causes were insufficient to explain the facts then multiple causes had to be postulated, and the laws governing the operational relationships between these causes must be sought. Truth, which had seemed at one time in the high days of materialism, to be just round the corner, is now a more distant prospect, like the receding horizon before the traveller. A new humility was apparent in just those scientists who knew most (Eddington 1939, Schrodinger 1944, Whittaker 1946, Whitehead 1948).

Analysis is, of course, necessary. Otherwise there can be no understanding. Too much insistence on wholeness stultifies and paralyses scientific enquiry. "When confronted by a given whole" says Sloan (1945) under these circumstances, "there is nothing to do but stand mute and mystically contemplate its ineffable wholeness".

However it is the realisation of the need for synthesis as well as for analysis which has given us a new sense of respect for the complexities of nature. The principal holds good for mathematical physical aggregates as well as for organic and social aggregates. "One of the most urgent problems of modern physics is this problem of synthesis. If a series of particles, independent and self subsisting molecules, atoms or electrons are brought together, how can the theorist account for the fact that the group as a group is something more than a mere set of independent particles?" (Levy 1939). Even the complex laws for example, of quantum theory will not suffice for the physicist. "It seems fairly clear that the laws of nature cannot be reduced to either those of mechanics or electricity, or as suggested by quantum theory, to a combination of both" (Bridgman 1927). Many other distinguised scientists have expressed their humility similarly and have admitted the limitation of their scientific vision (Sullivan 1933, Brown 1950, Bronowski 1951, Cantril 1950, Sorolem 1952).

The "new" science and the humanistic sciences:

There is a new emphasis, then, on organicness and the principle of "the whole". This radical break with classical theory has led to rethinking in many cognate fields. In psychology, for example, Smith (1951) re-examines Hume's theory of causation and offers some additional submissions to Hume's originals. These are concerned with conjunction and

replication of experience, antecedence-consequence, relationship and regularity. These will not be considered here though they display acute appreciation of the need to incorporate new concepts, if the science of psychology is to keep pace with the other sciences. His conclusions however warrant reproduction as they are of a general nature. "The explanation then involves the indication of the whole context of causal relationships in the absence or with the variation of any one of which, the observed phenomenon would be different. Some of these may involve the relationship of "prescription". Others may involve the relationship of functional dependence. Still others in the manner of a catalyst, may facilitate the interaction of the substances involved in a chemical reaction. But in terms of the above definition they are all definitely causes of the phenomenon and their presence in the causal context must be acknowledged. It is conceded that in the early stages of the investigation of a novel phenomenon, very few of the relationships involved and their nature may be known. Observed conjunctions and correlations are all that can with justification be undertaken. It is thus apparent that, even at the macroscopic level of scientific interest in a phenomenon, a vast fund of generalised and highly specialised experience would be required before the necessary grasp of the web of relationships involved was achieved. It may happen that an inadequate knowledge of some

of the relationships involved in a phenomenon for some time prevents the attainment of causal explanation and only justifies a statement of correlation". Other psychologists have been similarly sensitive to the changed conditions. Goldstein, for example, is well known for his insistence that behaviour must be understood as an organic whole - any factors which are isolated must be regarded as not necessarily having the same characteristics when incorporated into the whole (Goldstein 1939).

It is, of course, the social scientists who have been especially influenced by the changed circumstances. They, above all, were dealing with a subject of peculiar complexity, where the old laws of mechanistic materialism were particularly difficult of application - indeed it is doubtful if they could be applied at all. However it was now possible for Kurt Lewin (1952) to develop his field theory of behaviour, which discounted local determination, each whole having qualities over and above the parts or elements of which it is composed. Different types of wholes occur freely in nature - atoms, solar systems, insect colonies, a human being, a family. Thus a social group has qualities not possessed by the constituent individuals. A whole, to repeat yet again the truism, is more than the sum of its parts. Socially oriented psychiatrists such as Frank (1953) have coined such phrases as "biological relativity", indicating that processes may produce different products according to where, when, and upon what they

operate. Preoccupation with the "invading microbe" and cellular pathology is being transformed into a concern for the organism - personality. In this way, the emotions and feelings, the often fixated patterns of conduct and feeling are revealed as participating in the patient's striving for survival and the protection of his integrity (Caudill et al, 1952, 1953). To think thus in terms of circular processes obviates the dichotomies and conflict brought about by artificially abstracting fractions of the whole.

Sullivan, as the outstanding proponent of what we have called relationship psychotherapy, is our central concern in this paper. He leaned strongly towards the new concepts and based much of his thinking on them. He assumed that the scientific method could be applied to the interpersonal field and that patterns of action in the interview could be identified, observed, and defined in a manner that would move the entire process away from the obscurity of an art, to some extent, and toward the clarity of a science. He was concerned with the interaction of forces in the social field and developed a method of thinking increasingly congenial with the concepts of the modern physical sciences, and with the trend of the social sciences. He was moving in the direction of the so-called operational approach to the study of communication (Will 1954).

Nevertheless, the system was fragmentary, loose and incomplete at the time of his death.

A philosophical view along similar lines is given by Mead who sees the individual mind as the resultant of the educational pressures wrought by teachers, parents, the culture; but in the end the individual himself assumes responsibility for his own personality. And his spectator self (self-criticism) functions (presumably in a quasi-cybernetic way) to enhance his ability to communicate and interact with others (Mead 1934).

Is there a danger that in all this we are straying too far from biology which has always been held to occupy a central place in our medical discipline, which is after all our primary concern? At least we have Haldane's encouragement. He states categorically that when attempts are made to reduce biological phenomena to physics or chemistry, or psychological phenomena to biology, then nothing but confusion can arise (Haldane 1928). We are therefore free to explore.

To sum up the general argument of this section, it is contended that the radical rethinking in science initiated by Einstein, has permeated many fields of knowledge apart from physics, and that some of these have an important bearing on our concerns here; viz., biology, psychology, (including social psychology) and psychiatry. The term "operationism" has been

used by Bridgman in an attempt to define a master frame of reference into which some kind of common approach in these different subjects could be included..... Operationism means taking a fresh look at a situation, and describing it in terms of the actual happening - of something that has actually been done, or that has actually occurred - and therefore it has the validity of an actual experience. For example, a term is defined when the conditions are stated under which I may use the term and when I may infer from the use of the term by my neighbour that the same conditions prevail. "Simple observation shows that I act in two modes" says Bridgman (1945). "In my public mode I have an image of myself in the community of my neighbours all similar to myself and all of us equivalent parts of a single all embracing whole. It seems to me that only when we deal with both modes, do we become capable of achieving complete rationality. The operational approach demands that we make our reports and do our thinking in the freshest terms of which we are capable, in which we strip off the sophistication of millennia of our culture and report as directly as we can, what happens".

Applicability of Physical Theories to Humanistic Sciences:

An attempt has been made to show how twentieth century physical thinking has been extrapolated into other fields. Is this a justifiable and logical transfer? Should

the laws of physics be taken as a model for all other disciplines? The young sciences such as psychology, economics, and sociology, which came to life during what history will unquestionably call the scientific era, had hardly any choice. Such was the standing and cachet of the procedural model of physics, and so technically fruitful had it been, that in order to gain any sort of respectability for themselves, these new sciences had to obey the laws of the master science. Now, up to a point, indeed probably for a great deal of the way, this was a salutary discipline for them. The sterility of the old philosophical approach was avoided. Speculation was as good as forbidden, and the only way of establishing facts was by the experimental method. However in the present climate of change there are indications that escape is being sought from the old confining rules (Bouldry 1956).

In economics, for example, there is a reaction of sorts against the tyranny of figures and statistics. Vague tendencies can be given a wholly deceptive air of spurious exactitude through mathematical formulae (Balogh 1956). All these sciences that deal with man, especially man as a social animal, are constantly coming up against difficulties. Description in numerical terms is not always possible, and it can be misleading. In a recent correspondence on Deaf and Dumb sciences, Strachey (1956) blames the stultifying influences wrought on economists by the necessity to do

"largely pointless mathematical exercises (and the main body are still doing them) while their time should have been more usefully employed in other directions. In particular, they have been neglecting the decisive influence of political institutions which men have set up - influences which defy all attempts at expression in quantitative terms".

In psychology, something of the same feeling is becoming apparent. Consider the personality questionnaires. These were designed to be objective and free from value judgments. But criticism can be levelled at the way in which some of them are standardised. This has been noted in business organizations. For example, the tester will standardise the test against the persons who already fit a pattern, which is regarded as a good and suitable one for the particular organization which employs him. But in fact, this has already been happening for a long time. "If you always employ men of a certain type in an organization, then all your successful men will be people of that type. But no one confused this with the immutable laws of science" (Whyte 1956). The statistics of the test are often spurious. A large proportion of the mathematics is purely internal, i.e., it describes a test's reliability, but not its validity. In any case a tester can make an appraisal of a candidate's behaviour in the test if he is a perceptive man, quite apart from the test results altogether. There is also the dubious

claim that no one item is necessarily by itself reliable, that the test must be taken as a whole - but can one assume that a series of errors all added together might not be misleading? A psychologist reporting on one of these tests - the Bernreuter Personality Index - concludes that the results of studies using this test are "almost uniformly negative as far as finding significant relationships with other variables are concerned." It is, no doubt, due to the questionnaire approach, which appears to be a fruitless technique for the study of personality (Patterson 1946 ). What a person has actually done in the past, says Patterson, over a long period of time, would seem to be the single most valuable indication of how he will perform in the future. The rise and fall of the Rorschach Test in recent years, which seemed to fulfil all the scientific desiderata of objectivity and quantitative evaluation, and supported by unlimited statistical treatment, must give us pause before relying too uncritically on methods whose ease of transcription into mechanical and numerical symbols deceives us into equating this with accuracy of observation (Keelm 1952, 1953 a, 1953 b).

Equally however, in the present state of fluidity, there ought to be no place for esoteric and pseudo-scientific mystical schools. The memory of Mesmer and Gall still did not prevent the appearance of Hubbard's Dianetics - an engineering fantasy on psycho-physiology. Therefore most

workers adhere to basic principles in biology and psychology even though it may not be possible to go all the way in applying the new laws of physics. Indeed, it is doubtful if it is permissible to do so. Bertrand Russell (1926), an unchallengable familiar with relativity theory, points out that from the philosophical point of view the theory is seriously incomplete although it seems to serve physics well enough on a practical basis, and he uses the analogy of a person using a telephone without having to know anything of electricity. But he warns there is a grave danger when similar rules are carried over into dealings with human beings, for they, unlike telephones, are capable of feelings and emotions. "It would therefore be unfortunate if the habits of mind which are appropriate and right in dealing with material mechanisms, were allowed to dominate the administrator's attempts at social constructiveness". In more specific terms, London has criticised the tendency to apply the laws of one science to another, as though these laws were interchangeable. It is utterly inconceivable, for example, that Einstein could have deduced relativity by applying biological theories to the universe. Because of the obvious advantages it confers, the indeterminacy principle has attracted some psychologists and psychiatrists. London draws attention to the fact that psychology depends on the genetic history of each situation. This is necessitated

by the verbal nature of psychology and its need to express its findings in verbal terms. Words are notoriously inexact and even if they are given numerical reinforcement, they abound with nuances, with qualitative shades of difference which are a constant source of error, and a barrier to complete identity of the information which is being exchanged. There is no situation in psychology analogous to that in physics. Psychological phenomena, whether or not they are formulated statistically, are, because of their genetic complement, theoretically static for predictive purposes" Any resemblance between the demands of quantum theory and those of psychology is, at best, superficial. While it is true that the determination of any one element in a large scale psychological situation often frustrates the attempt to determine the whole situation, because of the attendant unavoidable disturbances involved, as with electrons, this is so because of the methodological difficulties inherent in the particular psychological situation under study, and not because of Heisenberg's principle, which is a concept specifically appropriate to only the quantum theories of the sub-atomic world (London, 1944, 1945).

Science, in its maturity, is now ready to admit that the hopes so freely expressed in its youth, were pitched somewhat too high. The well-known paradoxes which have been the subject of scientific debate such as the evidence that the other side of the moon exists, or the hypothetic existence of events which are

outside our sensory apprehension even with the aid of the most powerful instruments, have brought scientists to the point where they must come to terms with the unobservable, or assume omniscience, in which case the door is barred to all further progress (Dingle, 1938). Sometimes the retreat from science becomes a rout led by the scientists themselves. Langmuir (1943) for example, classifies events in the physical world into convergent and divergent phenomena. In convergent systems the laws of classical physics apply and the outcome is predictable. In divergent phenomena, from small beginnings increasingly large effects are produced. An idea that develops in a human brain, he says, seems to have all the characteristics of divergent phenomena (which are inherently unpredictable). "It is often said by the layman and many of those working in the so-called social sciences, that the field of science should be unlimited, that reason should take the place of intuition. But human affairs are characterised by a complexity of a far higher order than that encountered ordinarily in the field of science. It does not seem to me that we need be discouraged if science is not able to solve all problems even in the distant future. I see no objection to recognising that that field of science is limited. In the complicated situations of life we have to solve numerous problems and make many decisions. Reason is not always applicable and often it is too slow. We do what the human race has always done - we use common sense, judgment, and

experience. We underrate the importance of intuition."

Creative Imagination in Science and Art:

If these strictures are accepted, must psychology despair of ever attaining major status as a science? If it cannot be a science, must it then be an art, striving for recognition and status? The problem is acute enough in psychological medicine, where at least we have some basic foundations in biological laws and their relative indisputability. But other young sciences do not have this security, and this is felt especially acutely by the social sciences. Sometimes a feeling makes itself manifest there that science alone cannot take them far along the road to adequate understanding of their field. Redfield, for example, takes three classic works in social science (Veblen, Sumner, and De Tocquville) and two modern masterpieces (The Polish Peasant - Thomas Znamiesky, and The Great Plains - Webb) and he gave a group of investigators the task of examining these to identify the factors which made their contribution so outstanding. They were uniformly found to have serious methodological weaknesses. Yet they were outstanding in their insights in spite of this, and in searching for the reasons for their success Redfield is forced into the position of invoking their humanity and their creative imagination. The territories of the humanities, and the scientific study of man in society are in part the same. The subject matter of both is, centrally, man as a human being. To find out the significance of human

nature, there is no substitute for the human nature of the student himself. The ability to express some perception of human nature, a freshness of insight (independent of, maybe incompatible with, formal procedure and technique) and the ability to bring forward significant generalisations, depends on entering imaginatively into, and becoming a part of the human relations one studies. "Social science has a double nature - art and science. So far we have looked to the natural sciences, because they were the current successes. The art of social science cannot be inculcated; like other arts it has to be encouraged to develop - by humanistic education, history, literature, biography, ethnography, and philosophy. This general understanding of the world around us enriches and liberalises us. And the understanding of society, personality, and human nature, which is achieved by scientific method would return to enrich that humanistic understanding" (Redfield, 1949).

But is this merely a reintroduction of value judgments which the traditionalist of science always feared? Is not this asking the "why" question which contaminates techniques with emotional overlay? Techniques should be concerned only with means not ends. And the standing of technique is so high in the contemporary world that it is well nigh indispensable, whatever the discipline. Creative insight may not be the prerogative of the humanist. Perhaps

to men of science, science is an art and they themselves artists. Einstein describes Max Planck's devotion as akin to a religion, and only emotion could account for the intensity of his work. The social scientist who takes the traditional view holds that in order to avoid the pedestrianism condemned by Redfield, what is needed is the appreciation of the art of science by students destined to become technicians (Barnard, 1949). However, in Medicine, we cannot escape from value judgments. The assumption is implicit that health is preferable to disease.

The imaginative dissatisfaction that Redfield expresses is of course only too familiar in the practice of psychiatry. Can this be satisfied by admitting the legitimacy of a poetic truth? Can a scientific age acquiese in such a policy of double dealing? Toynbee (1949) contrasts our progressive understanding and our constant ignorance. The function of science is to give man control over nature - will it ever give him control over human nature? In the unconscious, he maintains, there is a scale of values, an ancient Weltanschaung, man's primary equipment before the Greeks discovered the intellect, and this is contemporary and side by side with the quaintly different spiritual outlook on values of modern Western man and his satellites. Toynbee then, from the historian's point of view sees the need for both scientific truth and poetic truth. "The language of philosophy and science,

which has been worked out to convey truths on the plane of the intellect, is an imperfect and inadequate instrument for trying to express truths rooted deep in the non-intellectual part of the psyche - which cannot be expressed adequately in language that has been designed for another purpose" (ibid.).

This identity of art and science in its higher reaches is always a little surprising when we come across it in unusual contexts. Two distinguished mathematicians of recent years have looked upon their work as nothing more nor less than an art (Hardy 1940, Weiner 1956). Hardy's book has been adjudged one of the best existing accounts of an artist's creative satisfaction. And in spite of all Weiner's practical achievement, he, like his old master, considers his primary satisfaction has been an aesthetic one.

Can psychology admit any artistic elements? Personality has been considered as a work of art (Bridges 1945). In the aesthetic sense it is a Gestalt, and it may be a good Gestalt (Eysenck 1942). Since the formal elements of art are universal (and they are arguably so) they are probably innate. But whether they are determined by the biological nature of man or whether they are a priori in the Kantian sense, can remain an open question. In any case, they are manifested in both mind and nature, and as aesthetic principles they need hardly be defended or discussed (since they are universal). The main aesthetic principles

are Balance, Proportion, Rhythm, and Unity. It is easy enough to find ample scope for the application of these to the personality. The individual himself is the artist, once he has mastered the main technique of personality building, which is the learning process, and it is acquired from important authority figures during childhood - the value attitude system of the cultural background being the groundwork of the whole.

Windelband's suggested synthesis:

Psychology is a compound of biology and sociology - the biological part is scientific, the sociological part is only dubiously so. The philosopher Windelband proposed two entirely separate disciplines (Allport 1938) one a nomothetic, the other an idiographic. The nomothetic disciplines would seek only "general laws and would employ only those procedures admitted by the exact sciences", while the idiographic disciplines would "endeavour to understand some particular event in nature or society". "Science thinks in terms of millions of years. Our little episodes of life, as wars, economic depressions, births, deaths and illnesses are transitory phenomena in a world of geological ages. As such, each individual episode is not scientific datum except to the extent that we can find in the episode a universal or durable principle or law". (Skeggs 1945).

In science, then, art, or emotion, which is the stuff of art should not, indeed cannot be ignored. In a

learned and thoughtful paper recently, Polanyi gives an account of how the passions are active in the whole history of science and are just as alive today. First of all there is the selective function of the intellectual passions which enables the scientist to choose subjects which are worthy to be investigated, thus implying a value system and a scale of interest. Otherwise, the speed of water running through a gutter, for example, or the contents of the telephone directory, would be as valuable a scientific fact as any other. Having therefore glimpsed a fact, which if it could be established would have meaning and significance, the scientist is then sustained by his heuristic passion, which links his appreciation of scientific value to a vision of reality. Its connative function is to sustain the persistent pursuit of the work through perhaps years of labour, and the force whereby the scientist is impelled to abandon an accepted framework of interpretation and commit himself, by the crossing of a logical gap, to the use of a new framework. Here the appreciation of scientific value merges into the capacity for discovering it; much as an artist's sensibility merges into his creative powers. Lastly, there is persuasive passion. Having made a new discovery, having seen a new vision, having developed a new way of reasoning perhaps, he has separated himself from others who still think along the old lines. Now his

persuasive passion urges him to convert his peers and his colleagues to his new way of thinking. But since he is using a new framework, how can they, who are still within the old framework, be convinced except by a conversion? This accounts for the heat, the bitterness, and the excesses of many scientific controversies in the past. They show no sign of diminishing today. The dream of scientific objectivity was a dream. Passion and controversy have a logical function and are indispensable elements of science (Polanyi 1956).

## Chapter 6.

## PSYCHOTHERAPY AND ART

### Mutual Fields of Interest:

In his Presidential Address to the American Psychiatric Association in 1954, Appel told of a woman patient of his who had not benefitted by all the extant therapies and was still profoundly depressed. He had tried many lines of treatment but with no success. In a mood of near desperation, he tells us, at one interview he began reading to her from a book - it was Thornton Wilder's Woman of Andros. They came to a passage concerning the death of Chrysis and the sentiments expressed in the book seemed to match the patient's own sentiments so well that she gained an immediate sense of relief, and Appel reports that this was the turning point of therapy.

The arguments in the last two chapters have been directed against any easy acceptance of Sullivan's relationship therapy as scientific. If it has little claim to scientific validity is it then to be considered as an art? Appel's present day example of the interaction of Medicine and Art is of course far from new. On the contrary, it is a reversion to an older form of medicine; medicine was always acknowledged as an art until very recent times, Hippocrates, Sir Thomas Browne, Sir William Osler). Those of us who are engaged in the practice of medicine seldom think of it as an art

nowadays, and many, when they do, remember it with shame; but it is salutary to remember that we are still so regarded by many. For example in many of our national libraries, the classification adopted is that of Dewey and here Medicine appears as a Useful Art. The psychological novel, the psychological drama are now commonplace in our cultural life indicating how close are the interests of psychology and literature. The interpretation of contemporary sculpture and painting is often an exercise in symbolic mental mechanisms. In fact, if we take the sub-division of psychoanalysis, there is more interest and discussion centred on this topic in the literary journals than in medical journals. Certainly the uncovering of the origins of motivation of human behaviour is the proper business of both literati and psychotherapists - perhaps the greater enthusiasm of the former for psychoanalysis is accounted for by the lack of practical success which the latter have experienced. Psychoanalysis as a practical tool in medicine has a limited application, at least in its classical form, and seems likely to remain the prerogative of a few elite; the larger body of the National Health Service for example takes little cognisance of it in any practical sense. It remains an area for the highly specialised few, even in psychotherapy. But in literature its fertilizing effects are everywhere acknowledged. "All the world's a mental hospital" says the book reviewer, "and Freud is our

therapist." Some modern poets are unashamedly clinical in their introspection (G.S. Fraser - Tongues of Fire) though in their case the tendency is no doubt aggravated by the illness of Ezra Pound.

Artist and Therapist:

Appel used his example to illustrate the worth of serendipity, but such a haphazard chance does not hold out much hope of bringing to light new principles which might be used in psychotherapy generally. By definition serendipity must remain a matter of luck. Now in the passage he quotes from the Woman of Andros the prose has a poetical quality and it is the poetry that is its most distinctive attribute. To a patient in depression who has lost interest in everything, to whom nothing seems worth while any more, it may be that poetry can convince him that life is still bearable, can awaken interest in him again, and make him feel reunited with the world even as it is, for the essence of poetry is the belief in the inherent worth of things (G. Lowes Dickinson). The perception of the patient is enlarged by seeing his private sorrow or anxiety displayed against the larger backcloth of nature and the world in general. The artist is one who, by a particular and selective perception of the environment can, by drawing from the well of his own experience, elucidate a new vision of "truth" which comes to terms with reality (Wilson, 1954).

Likewise, a psychotherapist, by his insight (perception) and his experience, can interpret the patient's symptoms in a new light (eludication of the vision) - which seems to be "true" - at least if the interpretation is a successful one - and gives the patient a new view of reality which encompasses a new adjustment, a new adaptation, with a possibility of a new freedom from confining symptons.

Now this is analogic argumentation, but it will be maintained here that if principles of exact sciences can be invoked to structure methodology in psychiatry and psychotherapy (cf Sullivan and all the exponents of Field Theory) then it must be permissible to accept analogy with art also. Man is an analogy drawing animal, but he should not confuse analogy with identity (W.H. Auden, 1956). Therefore the scientific view and the aesthetic view are not necessarily mutually exclusive - neither probably can claim absolute truth, but both may claim to be a valid way of looking at the process - truth being commonly accepted as many sided (Huxley, 1949). And though we live in an age dominated by science and materialism, yet, at the bar of history, Poetry for example, as an expression of imaginative feeling, as the movement of an energy, as one of these great primal human forces which go to the development of the race, has played, in the wide sense, as important a part as science. To quote the poet again, any work of art is the

joint product of a sensibility and a medium of expression (Auden, 1956). The psychotherapist, like the poet, must see, and having seen, must communicate so that others, or in the individual case, the other may see. Poets are concerned with feelings and emotions. So likewise are psychotherapists.

The Truth Value of the Senses:

The poetic view of truth however, or rather the poetic experience of truth is sensuous, as in all art, and the very fact that art exists at all is abundant evidence for the truth value of the senses. The universally acknowledged function of art is to reconcile man to his lot, to deepen his understanding, and to enlarge his tolerance for his misfortunes. By contemplation and by imagination he reaches a harmony - harmony between himself and the world. Thus, harmony on the one hand, adjustment and adaptation on the other - all are names for a similar goal. Freud apprehended this fact well enough. "His metapsychology restores imagination to its rights. As a fundamental independent process, phantasy has a truth value of its own which corresponds to an experience of its own - namely, the surmounting of the antagonistic human reality. Imagination envisions the reconciliation of the individual with the whole, of desire with realisation, of happiness with reason. While the harmony has been removed into utopia by the established reality principle, phantasy insists that it can and must become

real, that behind the illusion lies knowledge. The truths of imagination are first when phantasy itself takes form, when it creates a universe of perception and comprehension - a subjective and at the same time objective universe. This occurs in art. The analysis of the cognitive functions of phantasy is thus led to aesthetics as the "science of beauty" behind the aesthetic form lies the repressed harmony of sensuousness and reason - the eternal protest against the organization of life by the logic of domination, the critique of the performance principle" (Marcuse, 1956, pp. 143-144: Freud, Formulations regarding the two principles in mental functioning, Collected Papers, Vol. IV, Ch. I.).

Poetic Anticipations of Psychotherapeutic Concepts:

Indeed the more one examines the observations of the poets concerning their work, the more striking does the parallelism of their interests with the psychotherapists become. Freud enunciated his pleasure principle in 1911 (Collected Papers, Vol. IV, p. 14), but Wordsworth wrote the following in the preface to the Lyrical Ballads in 1800:

> "Nor let the necessity of producing immediate pleasure be considered as a degradation of the Poet's art. It is far otherwise..... it is a homage paid to the native and naked dignity of man, and to the grand elementary principle of pleasure by which he knows and feels and lives and moves (p. 539). We have no sympathy but what is propagated by pleasure. I would not be misunderstood; but whenever we sympathise with pain, it will be found that the sympathy is produced and carried on by subtle combinations with pleasure. We have no knowledge, that is, no general principles

> drawn from the contemplation of particular facts, but what has been built up by pleasure, and exists in us by pleasure alone. The Man of Science, the Chemist, the Mathematician, whatever difficulties and disgusts they may have to struggle with, know and feel this. However painful may be the objects with which the Anatomists knowledge is concerned, he feels that his knowledge is pleasure; and where he has no pleasure, he has no knowledge."

There is more than the germs of 'lust-unlust' here and it seems hardly surprising that in their own different spheres and at their different points in history both doctrines were exceedingly unpopular when they appeared. Wordsworth goes on to say that it is the poet's task to consider man and his environment reacting so as to produce "an infinite complexity of pleasure and pain". He considers the knowledge and sympathies which men learn from their daily lives - their convictions, intuitions, deductions, and habits of mind. He reflects on passions and thoughts and feelings - "our moral sentiments, and animal sensations, and the causes which excite these..... with loss of friends and kindred, with injuries and resentments, gratitudes and hopes, tears and sorrows" (p. 540).

This is the very material of psychotherapy, familiar ground to the therapist. Then, by stylizing painful memories and by putting them into metre, the poet gives us power to tolerate them - though his finest skill is in his ability to waken just enough of the original feeling to invest it with pleasure, but not sufficient to be distressful.

Lastly, in the famous passage "I have said that poetry is the spontaneous overflow of powerful feelings; it takes its origins from emotion recollected in tranquility; the emotion is contemplated till, by a species of reaction, the tranquility gradually disappears and an emotion, kindred to that which was before the subject of contemplation is gradually produced, and does itself exist actually in the mind". Wordsworth is here describing the phenomenon which is called in psychiatry abreaction - a well established corner stone of psychotherapy (Freud and Breuer, 1895, Brown 1920, Freud 1920, McDougall 1920, Ferenczi and Rank, 1925, Symonds 1954).

Interpersonal Psychiatry and Aesthetics:

Turning to the field of relationship therapy, our central concern here, some of the conditions under which therapy can take place are described in the writings of Sullivan and his pupils. The personality and behaviour of the therapist will be found to correspond to some of the aspects of the artist already described. Clearly, in a psychiatry of interpersonal relationships, the personality of the therapist is of prime importance - if he is unable to enter into an appropriate relationship with his patient, then treatment cannot begin. Once again the great divergence from a Freudian analyst is apparent.

The first pre requisite of the therapist is that he shall pay the closest attention to what the patient says and therefore his first task is to listen. "To be able to listen

and to gather information from another person..... is an art of interpersonal exchange which few people are able to practice without special.training." To be in command of this art is essential for a good psychiatrist. Also it is now customary for the patient and therapist to look at each other - visual contact being valued as an aid in the therapeutic process (Fromm-Reichmann, 1953, p. 12). By such means communication takes place between the participants. Indeed further information from kinaesthetic sense data is also valued (p. 24), where a state of empathy exists. By listening, looking and empathizing, he acquires his data. Now the purpose is to encourage verbalization and conceptualization of all the things and events that have troubled the patient - the forgotten as well as the remembered; having achieved this the psychiatrist's task is to "convey to patients a valid 'picture' of the nature of their difficulties and eventually of the structure of their personalities. The purpose of interpretation and interpretive questions is to bring dissociated and repressed experiences and motivations to awareness and to show patients how unknown to themselves, repressed and dissociated material finds its expression and colours verbalized communications and their behaviour patterns, such as their attitudes, actions and gestures". So the therapist, like the artist or poet, must be a person able to perceive - he must learn to "increase his awareness"

so that communication will be more meaningful (Sullivan, 1954, p. 69). He has to "sense out the areas where anxiety is evinced even though hidden by security operations". The therapist must have a "sensitivity to the patient's feelings" so that he may arrive at a point where he can form some "impressions" of the patient's distortions (ibid., Ch. VI). The aim is to clarify for the patient the troublesome aspects of his life. The skill with which the therapist "draws in" or sketches the personalities of significant others (for although the group is a two-group only, there are constantly imaginary people also in the field) and the extent to which his sketches match with the patient's concept of their truth is a determinant in the success of the therapy, i.e., the art with which the therapist conveys the truth that he sees. The therapist, then, has an impression, thanks to his sensitivity, and he interprets it or expresses it. Will (1954) allows that this may be considered an art but is afraid of the word because it suggests that the particulars of the relationship are not subject to observation and description. He uses terms of opprobrium such as intuitive, subjective, personal, insignificant, and unscientific. "Thus, to speak of the art of interviewing may imply that the processes in that interaction are not observable and that for reasons not entirely clear, the situation might best flourish in an atmosphere of privacy". Such a defensive attitude is

not justified, for there is a science of art which removes such matters from mystery and setsnout to show that the process of artistic creation can be analysed like any other process. Indeed if we take the latest of these aesthetic theories (Croce, 1953) the parallels to processes just described are striking. A poem for example is a complex of images and the feeling that animates them; quotations from poetry consist of images of persons, things, attitudes, gestures, sayings, joys, and sorrows; and through these images run feelings which we share with the poet of bitter memories, shuddering horror, melancholy and homesickness - something which is not quite expressible in logical terms, but which only poetry can express in full. By converting feelings into images, or rather by making these two interchangeable, poetry becomes "contemplation of feeling". But Art is not the immediate experience of feeling which often includes great visceral disturbances and physiological distress which has to be enacted and endured. Creative imagination or poetic imagination converts the chaos of immediate feeling into clear intuition which, by aesthetic expression, assumes words or outward form, which is then contemplated. This distinction between contemplated feeling, or poetry, and feeling which is acted and endured is the source of the power, ascribed to art, of liberating us from the passions and calming us (the power of catharsis). Art cannot be produced by empty or dull minds and the basis of all poetry is human personality. The artist must have a share in the world of thought and action, says

Croce, either in his own person or by sympathy with others, to live the whole drama of human life. Fromm-Reichmann maintains "We can understand human personality only in terms of interpersonal relationships. There is no way to know about human personality other than by means of what one person conveys to another, that is, in terms of his relationship with him."

There have been difficulties in understanding how the artist translates his intuition into expression. This springs largely from the artificial abstractions resulting from Dualist thinking (Croce). If we accept the Monist position, a feat which most psychiatrists are glad enough to do, then we see that intuition and expression are really identical. "An image that does not express, that is not speech, song, drawing, painting, sculpture, or architecture - speech at least murmured to oneself, song at least echoing within one's own breast, line and colour seen in imagination and colouring with its own tint the whole soul and organism - is an image that does not exist."

As to the communication of this image-expression this is the proper sphere of the technique of art. Technique is not an intrinsic element of art but has to do with the concept of communication only, and is quite distinct. When the poet finds the words silently in his own thoughts, the poem is complete. When the words are rearranged, altered and transposed so that others may share the experience, a new phase

has been entered, not aesthetic but practical.

The Aesthetic Dimension:

The aesthetic dimension occupies the central position between sensuousness and morality, the dimension in which the senses and intellect meet (Kant, 1914, p. 412), and the aesthetic perception is accompanied by pleasure. Civilization and the reality principle have subjugated sensuousness to reason, and only in art is this 'cognitive' force of the senses permitted by tyrannical reason (Jung 1924, 1933). Yet in spite of this weighty support, the aesthetic dimension is regarded with suspicion by many doctors, often dismissed as mystical, inappropriate, and having no practical application, medicine being essentially a pragmatic undertaking. But it is just from this practical standpoint that an appreciation of the apositeness of the aesthetic dimension is most important, as has been well argued by Prinzhorn (1932). It is common experience in medicine that the unvarying application of a formal theory to each illness is absurd; that it is the physician's prime obligation to help his patient to get well by whatever means possible - even should this mean abandoning the strict scientific principles of objective methodology. In considering what forms the help may take, Prinzhorn conceives the therapist as acting in two roles mainly - either the pastorly (usurper's role) or the sceptic (his proper role) - though they include admixtures of many other roles; the mighty leader, the wise man and seer,

the person learned in law, the representative of a powerful institution, priest, lawyer, teacher, physician, master, friend, and lover. And although the helper may help the patient by good advice, enlightenment, interpretations, discipline of the will, learning, suggestion, and the granting of a kind of absolution following confession, yet Prinzhorn names the Eros Paidagogos of Plato as the therapist's really powerful weapon. This is a difficult concept but seems best expressed as a libidinal (i.e., of sensuous origin) growth toward self-sublimation in lasting and expanding relations (Marcuse, 1956). He sees no essential difference between eros paidagogos and the 'caritas' of the priest, though the therapist like the priest should be aware of the authority in whose name he acts. Since this has little to do with science or technical knowledge, Prinzhorn believes that there is a danger in the supersession of the ideal physician by the ideal of science. Recalling the tripartite Hippocratic aphorism concerning the disease, the diseased person, and the physician, it becomes necessary, certainly to be scientific ("nothing must be lost of the knowledge of the disease") but to do this must be added an all round knowledge of the diseased person and his requirements. "To become qualified for this is the new goal of the medical training of our day. This necessary change in the attitude of Medicine is due, almost exclusively, to the psychotherapeutic experiences of the last

fifty years:- indirectly to the new psychology whose growth we must follow rather in THE WORDS OF THE POETS AND THINKERS THAN IN THE TEXT BOOKS OF THE SPECIALISTS, if we are really to experience its practical use and value".

Method by itself cannot account for many of the known facts - for example the astonishing consistency of the improvement rate obtained by such widely separated exponents both in time and in practice as Esquirol, Weir Mitchell, and the leucotomists Freeman and Watts, to take only a few examples (Masserman, 1955). The figures of one third greatly improved, one third slightly improved and one third unchanged applies even to methods extant today (Freudenberg, 1947). There is a considerable body of thought then to indicate that psychotherapy must concern itself with the aesthetic dimension. And this, not from any theoretical consideration, but such as may be applied in daily practice as an inherently pragmatic step in therapy.

# PART III.

## COMMUNICATION IN THE DOCTOR-PATIENT RELATIONSHIP.

## Chapter 7.

## COMMUNICATION - THE AUDITORY MODALITY.

## (Outline of communication principles in psychotherapy).

Communication theory comes nearest to being a unified discipline for all those psychiatrists and social psychologists who are interested in interpersonal relationships, and it encompasses perhaps most of psychiatric operations in this mode. An operational definition is given by Ruesch (1954). "A physician is a psychiatrist when he specializes in disturbances of communication and attempts to improve the patient's ways of communication by physicial, psychological, or social means". Certain demands upon the therapist emerge. He must be an expert in communication himself. His knowledge of communication will enable him to select possible interpretations of the patient's communication, and his skilled feed-back (in terms of information theory) will constantly alter the patient's communication system. This will in fact be the process of psychotherapy. Now before any operations start, it will be clear that sensory input in machine terms to the therapist is fundamental. Without adequate information he cannot function. Therefore his observation is all important. He must be extremely perceptive, because observation provides the sensory input which makes the motor

output or transmission of communication possible. Ruesch suggests that the therapists training therefore should include:

1. The art of observation.
2. The art of decision making.
3. The art of expression.

This implies a re emphasis of basic orientations in approach. For example the old fashioned clinical observation has undoubtedly declined with the increased attention paid to laboratory, medicine and drug chemistry. In terms of communication theory it would be perhaps as important to apprehend, say, the significance of the gesture of a work of Rodin as to learn the musculature of the foot, because in this way perception can be sharpened. The whole realm of nonverbal communication and the meaning of gesture is unexplored and underestimated by psychiatrists (Barbara, 1956).

If we accept that this is the way in which psychotherapy is developing and there seems little doubt that it is so, it will be necessary for a time at least to use two languages - (1) a personal or therapeutic language which is easily understood by the patient, and (2) a scientific language for carrying out general observations and elaboration of theory necessary in professional or technological communication.

In machine terms (see p. 100 later) this would correspond in the first instance, to using words as denotation in digital computers, while in the other, new referents (perhaps such traits as oral, anal, and others such with special significance) on the

lines of analogic computers will be more helpful.

## COMMUNICATION - The Auditory Modality.

### The need for Communication:

Sullivan makes it quite clear that adequate communication is very near to being the goal of his therapy. "Looking back on the development of Sullivan's theories, I find it significant that one of his early concerns was with the problem of communication..... His treatment of language, symbols, and communication in the present book is one of the most useful for psychiatrists that I have ever seen..... This interest in communication is not a side branch but is basically related to the core of Sullivan's work. This core can be described as the psychiatry of interpersonal relations or as the study of communication between persons." (Cohen 1953, pp. xi-xii). It is tempting to assume that improved communication will by itself lead to harmony and clearing up of many artificial difficulties and misunderstandings. But such an assumption is too facile. For example Morris (1946) points out that the Irish and English shared a common language for centuries, but this did not lead to any increased integration or socialization or cooperative social behaviour. Mankind may dream of a common language which would hasten the day of universal security, but Park issues a warning that competition is as pervasive as cooperation (Park, 1938).

Nevertheless, communication affords a means whereby difficulties may be tackled, and without adequate communication

it is difficult to see how changes can be effected, at least voluntarily. An imposed change from without clearly has not so much need of free communication, but then this is an idea which is foreign to psychotherapy.

The inexactness of Language:

To revert to our original definition, on the "operational" level, psychotherapy consists of patient and therapist meeting together and talking, and the principal method of communication is by words. Now words are symbols and they may or may not have exact referents. There are no absolute standard semantic relations between a verbal response and a particular stimulus. The difficulty lies in the non-identity of private and public stimuli. It is often necessary to infer the private event, a procedure which is contrary to the direction of enquiry in a science of behaviour. The processes by which terms are assigned to private events are listed by Skinner as follows, (1945): (1) association and conditioning; (2) collateral responses (e.g., hand to jaw in toothache); (3) the speaker's behaviour - overt and covert - may acquire additional wealth of proprioceptive data; and (4) responses originally learned to public stimuli may be transferred and become part of the individual's repertoire of responses to private stimuli (e.g., as in metaphors and metonomy). "Terms referring to private events have never formed a stable and acceptable vocabulary of reasonably

uniform usage. None of these conditions permits the sharpening of a reference and therefore a rigorous scientific vocabulary for public use cannot be established." (ibid.). That is to say that either of the two people in the group we are considering may use a word with a particular shade of meaning, not shared by the other. This accounts for some parochialism in psychotherapy. Take, for example, the word "canny" which has widely different meaning and usage in North-East England and Scotland. In another, more personal way, the patient may say "When I sat down the pain in my chest started, and I began to tremble and shake and I wanted to run outside". The therapist might then ask "You began to feel afraid?" "No, I wasn't afraid, I just felt awful". Clearly there is no more to be said in this particular situation, for the therapist in trying to understand just how the patient felt, so as to appreciate his motivation for his next behaviour, has apparently made an interpretation of the word "afraid" different to that which the patient makes. Words then are a loose set of symbols, and the meanings that they convey are capable of different interpretations. Everyone knows what is meant by the aphorism that America and Britain are divided by a common language. Indeed words are often quite inadequate to convey exactly what is intended in a given situation, not only because of poor verbal ability of the speaker. The psychotherapeutic interview cannot be regarded

as an exercise in logic, though perhaps some education in logic may occur. But such exchanges as do take place are more likely to be non-logical in nature. "To a patient (as to a mob) reason and good sense cannot effectively be talked. The patient is moved by fears and by many other sentiments, and these, together with reason, are being modified by the doctor's words and phrases, by his manner and expression" (Henderson, 1935).

Exact methods of communication do indeed exist. Simple mechanical calculating machines have been in existence for some time, and more recently this field has widened its scope considerably since the introduction of electronic computers (Shucken, 1954). Their significance for neurophysiology and psychiatry has been considered by Ashby (1954) inter alia. Numerical symbols have an exact reference and the machine can deal with these because the same digit always has the same meaning or value. The transition from simple symbols such as digits to more complex symbols such as words is difficult. The first mechanical translator has therefore still to be built. Before this can be done, it will be necessary to programme the inexactness of language. This will require an extensive reorganization of language, and logician, mathematician and linguist will have to evolve a formal and watertight set of language symbols (which must among other things include a basic contextual analysis) which will conform to an algebraic code (Masterman, 1956). No doubt the attempt will soon be made

although we know well enough that translation, carried out by a human translator, even one with profound sensitivity, can lose some inherent values in a work of art. For this reason Croce (1953) maintained that a work of art was untranslateable. Are the poems of Verlaine or Baudelaire in their English translations equal in their aesthetic value to the originals? "Although the philosopher and the philologist approach this question from rather different angles, they are both agreed on the omniprescence of affective connotations in everyday language, in contra-distinction to the standards which logical and scientific discourse strives to attain, and which can only be completely secured in the formal symbolism of mathematics and logistics" (Ullman, 1951). It will at once be apparent that the conversations that occur in the psychiatrist's consulting room can hardly, under these strictures, be accepted as scientific discourse.

Language as Behaviour:

Verbal transactions therefore are not at present to be considered as an exchange of precise information. Worse still, words can and do influence habits of thought in ways which are certainly not logical and which have been present for so long that we hardly notice them. Language is old and has primitive ways of thinking built into its structure. Any culture transmits itself by the symbols and signs it has devised for referents which are important for it. In fact

culture and language are so interlocked that reciprocal activation or even union is taken for granted. "The recognition that culture is largely a sign configuration suggests at once that the transmission of culture is mainly effected by the transmission of signs from the existing members of the society to the young, or to those who enter the society from other societies." (Morris, 1946, p. 207).

Value systems are therefore being learned from our earliest years, and they are not always challenged again when more critical years are attained. A few years in medical practice soon show the extent to which myth and old wives' tales influence the living of many people, especially neurotics. As well as embodying culture, speech and language can also be considered as the primary expression of man's social tendencies. When people are together it seems natural to talk and silence is felt to be unnatural, even embarrassing. This is not a highly civilized and artificial development but rather goes back to quite primitive experience when the silence of a stranger is felt to be hostile (Malinowski, 1948). In primitive societies talking is not just a method of exchanging information or a mere reflection of thought, it is a link in concerted human activity, a piece of behaviour. "Phatic communion is a type of speech in which ties of union are created by the mere exchange of words (ibid., p. 249). This goes close to the essential social

nature of man, His tendency to meet together with others is closely associated with his function of speaking. Speech is the intimate correlate of his social instincts, and in this communion certain benefits are conferred on those participating. Bonds are created between speaker and hearer, not quite symmetrical it is true for the one linguistically active receives a greater share of social aggrandizement than the hearer who nevertheless listens so that he in his turn may be sure to have a hearer when he has the need to speak. Narrative speech in primitive communities is a mode of action as well as a reflection of thinking. Or, to put it in more strictly semantic terms, the referential function of a narrative is subordinate to its social and emotive function." "We can say that language in its primitive function and original form has an essentially pragmatic character; that it is a mode of behaviour, an indespensable element of concerted human action; and negatively, that to regard it as a means for the embodiment or expression of thought is to take a one-sided view of one of its most derivative and specialized functions. (ibid., p. 251). The very sound of words influences their interpretation. Thus we have sonorous words, suitable for use in magic and religious rites, and there are also majestic words, to be used by leaders and kings. The power of swearing, the agnostic's reluctance, and dislike of using blasphemy, the rejection of

obscenities - these are some of our present day attitudes springing from primitive sound value systems. The prominence of sound in acquiring words is seen in children who often are noted to take a liking for a certain word and repeat it over to themselves, savouring it, becoming familiar with it, and making ready to use it as part of their vocabulary. The conditions or context, favourable or unfavourable, under which we first acquire a word are likely to have permanent influence on its future use. Darwin (1904) and others have tried to show that expression of emotion in these sound reactions has some survival value. Some hold that the meaning of words is given by their sounds (Paget, 1936), (Davis, 1938).

We are therefore faced with the paradox that language, far from being the vehicle of thought, is in fact little influenced or only part influenced by thought. But, as Malinowski says, "thought, on the contrary, having to borrow from action its tool - that is, language - is largely influenced thereby." The therapist then in interpretating the patient's words has to consider an impressive array of possible significances.

Intellectual and non-intellectual use of words:

Words may be used to convey meanings other than their logical referents. In a scientific statement, the linguistic activity is peculiarly and rigorously narrowed to strict

symbolic function. But many subjects, especially such as are discussed in psychotherapy are couched in words which have a much greater emotive than symbolic value. The patient after all is recounting many experiences and memories whose primary impact upon him has been emotional. It is extraordinarily difficult to speak about emotion in unemotional language. The data then, offered to the therapist, no matter how scientifically oriented he may be, is not offered in terms of the necessary pointed and exact reference; this is especially true when the therapist is "participating". Style, choice of words, grouping spacing of words influence, distort and complicate a simple meaning. One sign, one cue becomes several signs, within which the hierarchy of prominence may be important. "In aesthetics, politics, psychology, sociology and so forth, the stage of systematic symbolization with its fixed and unalterable definition has not been reached. The most highly systematized sciences are those which deal with the simplest aspects of nature. The more difficult, and to many, naturally the most attractive subjects are still in a stage in which it is an open question which symbolisation (i.e., which route for reaching a referent) is most desirable..... It is often impossible to decide whether a particular use of symbols is primarily symbolic or emotive" (Ogden and Richards, 1946). It is possible therefore to consider words as acting

in two ways:

(a) to convey information - the symbolic use,

(b) to evoke attitudes - the evocative use.

Almost always, in everyday speech, the two functions are so closely interwoven that it may be quite difficult to separate them. It may indeed be quite impossible to do so, on the grounds that such separation is artificial. Nevertheless, both components seem to be present. This is why the scientist distrust words - weasel words, he calls them, though, to refer again to Polanyi, the scientist in his turn, may become the victim of the emotive power of words.

Sullivan's Verbal Behaviour:

How does Sullivan use words in the psychotherapeutic situation? He has left us no detailed case reports and analyses, as did Freud, containing exactly what he said or how he dealt with a particular case, from first to last. Yet he does, here and there, tell us his actual words in different incidents involving different patients. The following are a few examples taken from The Psychiatric Interview;

"You're getting quite anxious, aren't you? Well, what's the hurry about this? We can drop it, and go on about so and so, can't we?" (p. 224).

"Well, am I supposed to think very badly of you because of that?" (p. 225).

"Well, how come? What is so lamentable about such a thing?" (p. 226).

"Well, I suppose you're another who has been ruined by masturbation?" (p. 226).

"Now tell me, how much did you masturbate to accomplish this ruin?" (I would endeavour to get across some faint satire by this repetition of "ruin") (p. 227).

Thus I may look at him with surprise and chagrin and mutter to myself "For God's sake" - and let him make what he can of that. (p. 228).

"And pray, out of what was that built?" (p. 233).

"I can scarcely believe it. What on earth gives you that impression?" (p. 235).

"How come you dislike it? Is it supposed not to be respectable or something?" (p. 230).

These are nine out of twenty examples of oratio recta which Sullivan gives in his chapter on Problems of Communication - an appreciable proportion, almost half, in fact. It will be seen that they are nearly all in the form of questions, rhetorical questions to be exact, and there is no doubt as to the answer he expects and hopes to get. Further, such words as "ruin" and "lamentable" are words whose main impact is emotional rather than symbolic, and he is here openly using irony. Making due allowance for his Americanism, the easy conversational, half-bantering style is barely recognisable as a serious contribution to scientific knowledge. An Information Theorist would not attempt to

offer such language to a mechanical communication device. A clear and discriminating reference is required. But the nearer one approaches to this ideal, the more falsely simplified the situation becomes. People are complex and complicated and so are their emotions and motivations. A cruder reference more nearly reflects this complexity though it stands in the way of scientific treatment.

In his written language also, Sullivan is adventurous, jaunty, even, one might say, romantic. Consider his vocabulary in the passage that deals with the learning of gesture and language (The Interpersonal Theory of Psychiatry, pp. 178-187). "The rich development of sounds, tonal patterns, rhythms and what not (ital.) that makes up the various great and small languages of the world." This 'what not' is a great favourite of his and is only noteworthy as being inexact in exelcis. "Off the beam" occurs on p. 181. "Shoos" on p. 186. "Big chunks of mimicry" p. 179. He uses humour and satire freely - witness the passage on p. 182 concerning the visiting Aunt Mary. He does not even burke at using slang terminology - 'gotten' on p. 179. The use of slang as a calculated method of introducing prejudice is pointed out elsewhere by Pei (1952). The style therefore is colourful, appropriate to journalism, conversation, belles lettres or other literary exercises, but strikingly different from the language of the purely scientific students of human

behaviour such as Hull (1946) or the language of the mathematically oriented Communication Theorists. This is in fact calculated literary artistry. But language is an affair of impression as well as expression, and this is of the essence of its communicative powers. Reference has already been made to the mixture of logical and effective elements which constantly occur in language. Sullivan notes this distinction in passing but rejects such an abstract separation (see his note on the symbolic and non-symbolic, pp. 186-7 of The Interpersonal Theory of Psychiatry). He is concerned with human experience and behaviour, and for him all cues, whether symbolic or evocative, are signs to be interpreted, discrimination and classification being misleading. This dismissal may be justifiable from the practical point of view but merely to dismiss an objection so well authenticated, does not help understanding. It is possible, and probably more helpful, to regard these two classes of signs as acting in different ways. "There is a certain type of mind, which, though it uses evocative language itself, cannot, on reflection, admit such a thing, and will regard the question as relevant upon all occasions. For a larger body of readers than is generally supposed poetry is unreadable for this reason. The other danger is more important. Corresponding in some degree to the strict sense of true and false for symbolic statements T(S), there are senses which apply to

emotive utterances T(E). Critics often use True(E) of works of art where alternative symbols in some cases would be, 'convincing', in others 'sincere' in others 'beautiful' and so on. And this is commonly done without any awareness that True(E) and True (S) are different symbols. Further, there is a pure evocative use of True - its use to excite attitudes of acceptance or admiration; and a purely evocative use of False - to excite attitudes of distrust or disapprobation. When so used these words cannot, since they are evocative, except by accident, be replaced by others, a fact which explains the common reluctance to relinquish their employment even when the inconvenience of having symbols so alike superficially as True (E) and True (S) in use together is fully recognised. Affection for a word is often due to its emotive efficiency rather than to any real difficulty in finding alternative symbols" (Ogden and Richards, 1946).

Vocal Tone:

Words as symbols are dependent, among other things, on the voice of the person who utters them, and this introduces an additional factor in any consideration of words as signs. Linguistic genealogy and culture patterns so invest the spoken word, that the verbal statement is very often an interpretation as well as a statement of fact. Inflection as a social class indicator is well known in Britain. Sullivan in his attempt to be inclusive, and this

inclusiveness is one of his most valuable contributions, takes into account all post-language symbols, one of which is vocal tone, classed as gesture. "In particular, restrictions on the tonal scope of the voice probably are the first forbidding gestures that are built into the separate personification of the bad mother in contrast to her physically identical counterpart, the good mother. It is clear in dealing with domesticated animals, and it is certainly very clear in later phases of human life after infancy, that a great deal of what might be called 'the way the wind blows' is conveyed tonally; it has nothing particular to do with verbal content, but is instead a matter of how verbal content is expressed, and the like. So the first forbidding gestures, and among the world's most dependable forbidding gestures that human beings ever differentiate in the interest of avoiding anxiety and pain, are undoubtedly changes in an accustomed voice. To the infant, in all likelihood, it is not a question of changes in a voice, but of two different accustomed voices. But from then on, there are few things more effective at changing the immediate integration of interpersonal situations than certain tonal tricks which come to us very, very naturally because they are, in a very real sense, the second oldest thing that has been very important in our experience with producing, hearing, and interpreting the voice" (Sullivan, 1953, p. 90).

Elsewhere he draws attention to the melody, rhthym, and

emphasis of speech and in his 1948 lecture series he referred to these as the "expressive" as opposed to the "denotative" aspects of language (ibid., p. 178 footnote).

Voice can, and is used always and all the time by everyone as means of judging personality. The psychiatrist only does it more extensively and more consciously than the average person. In this connection Ryle's (1949) refusal to consider psychology as a qualitatively different type of knowledge from other older ways of knowing, is applicable. "I have argued that the working of men's minds are studied from the same sort of data by practising psychologists, and by economists, criminologists, anthropologists, political scientists, and sociologists, by teachers, examiners, detectives, biographers, historians, players of games, by strategists, statesmen, employers, confessors, parents, lovers, and novelists. If we give up the idea that psychology is about something that the other human studies are not about, and if we give up therewith the idea that psychologists work on data from which other studies are debarred, what is the difference between psychology and these other studies?" (p. 322).

We judge a person's social background by his intonation, enunciation, and his vocabulary range. The recent controversy of Professor Alan Ross concerning U and non-U speech (Ross 1955) will be remembered in this connection. We might even attach significances to the way in which an

individual differs from what might have been expected to be normal for his group. "We cannot draw up an absolute psychological scale for voice intonation, rhythm, speed, or pronunciation of vowels or consonants, without ascertaining the social background of speech habits. It is the individual variation not the objective behaviour as such that matters" (Sapir, 1926). But this judgment can hardly be called scientific; in fact it is a way of judging which is specifically non-scientific (in the accepted sense) but intuitive, it is qualitatively a different kind of knowledge, or a different way of knowing. After all one does not blame a tone-poem for not being a fugue, and one might prefer to hear an opera rather than merely read the score, though the intellectual exercise is the same in either case..... It is by feeling tones, nuances of emphasis, phrasing, speed of utterance that we know - all these indicate feelings, sentiments, and emotions..... And this is 'instinctive' expression of volition that man shares with other creatures in the animal world. Any parent knows that the mating cries of cats greatly resemble the distress cries of a human infant. We can perhaps take 'illogical' prejudice against a perfectly worthy person because of his voice (since it is in all probability associated with unpleasant memories somewhere in our past - a form of conditioned learning) and never know why we dislike him, or even that we do. Yet this fact in itself

may be responsible for a decision not to cultivate an association with this particular individual. For various reasons, but mostly emotional ones, a 'lisping sissy' might be thoroughly disliked; this and other examples like it are common experience. But again this is a far cry from the objective intellectual observation of science. A scientific truth is impersonal - for example a mathematical equation or a chemical formula would be equally easily appreciated by mathematicians and chemists in Korea, Malaya, and Canada. Such a statement would carry over no 'tincturing' from the language that expresses it. It is far different with words. Every language is itself a collective art of expression. There is concealed in it a particular set of aesthetic factors "- phonetic, rhythmic, symbolic, morphological - which it does not completely share with any other language" (Sapir 1921, p. 240).

Speech is a form of behaviour and the way in which a thing is said is often as important as the message. Feeling tones of words are of no use, strictly speaking, to science. When the scientist is being scientific, he retires into his own symbolic language of 'x' and 'y', or the synthetic language of electronics, or the polysyllabic language which chemistry has evolved for its own communication needs, though Berzelius had to face considerable opposition from his

colleagues when he first tried to introduce the use of Formulae (Woodger, 1952), though we can see now that this was the vital step inaugurating the golden era of chemistry. But psychiatrists, psychologists and doctors are condemned to converse with their fellow human beings in words (Pear, 1931). In concerning themselves with the patient's communication they are faced with a situation in which a definitive technique is lacking. Advance along this road to better communication is difficult because the training programme does not at present stress the observation of other people, or the kind of interaction that takes place between them in interpersonal situations. A dictionary of communication in psychotherapy would be very desirable, but it would have to include such considerations as the cultural background of the speaker, logical and emotive differentiation of words, tonal variations, and language as social behaviour as well as other factors to be considered shortly. Few regrets have been expressed at the passing of Latin from its position as the international language of scholarly exchange, though Scopenhauer saw quite clearly that it would open the way to some trickery in controversy when protagonists used their national language (On Rhetoric, Vol. II, pp. 303-315). "Scientific accuracy and rigour of control increase with the disappearance of identity of individuals, so that at the multiperson and neuronal levels the prerequisites for statistical treatment are fulfilled" (Ruesch 1954). But as practical therapists we

are inexorably concerned with the individual and the goal is, in the immediate sense, more important than the implementation. In the present incompletely developed state of communication technique therefore, psychiatrists ought not to be overawed by the status of formalized training (ibid.). New developments are to be welcomed and are necessary (Masserman, 1953).

## Chapter 8.

## COMMUNICATION - THE VISUAL MODALITY

### Sullivan's Use of Gesture:

"Disturbances in communication are not only expressed in terms of the spoken or written word, but in all the interplay of sudden gesture, feelings, bodily reactions, glances, etc., which are constantly going on in dynamic human beings." (Barbara 1956).

One of the ways in which the post-Freudians broke with tradition was the restoration of the therapist to a more usual position vis-a-vis the patient. That is to say, instead of the patient lying on a couch with the therapist sitting out of his range of vision, both parties now sit facing each other. There are several reasons for this; the doctor finds it advantageous to observe the patient in some detail as it enables much time to be saved (as compared with formal analysis), and also, if an interpersonal relationship is to be established, the patient is more likely to establish a useful working relationship with someone he can see, otherwise an obviously contrived situation may make him feel ill at ease for a long time. Visual contact is valued as an aid in the therapeutic process, and in its absence the situation is unreal (Fromm-Reichmann, 1953). One may "emotionally eavesdrop" by

watching inadvertent actions, attitudes, gestures. This observation of the patient is quite minute - his mood, his diffidence, his apathy, etc., (sic), his apparent expectations, the impression he wishes to make, the way in which he enters, his sincerity or pretence. All this is gleaned from observation of gesture - gesture, that is, in the widest interpretation of non-verbal communication, the more obvious components of which are gait and posture, general appearance, facial expression, type of clothes and grooming, as well as the degree to which he seems to interest himself in the new environment. "Such observations will help the psychiatrist in his evaluation of the patient's actual feelings" (ibid., p. 49) . Even with schizophrenics in whom he was intensely interested at one time and who do not tolerate being looked at very well, Sullivan would sit at an angle of ninety degrees so that he could still see the patient's sudden starts, changes of posture, and involuntary movements which he regarded as well worth knowing even though he could not make out anything of their facial expression. Gestures, broadly conceived, he believed to be "wonderfully dependable" clues to shifts in the communicative situation (clue, we are to suppose, equals sign or cue). In another place he lists "disturbances in the gestural aspects of communication" as a subdivision of his diagnostic signs of mental disorder (Sullivan, 1954) - i.e., stereotyped gestures,

mannerisms and tics. In treatment, although he does not make use of massive gesture in the way that Moreno does (1953) yet he advises the therapist to educate the patient to learn alertness in noticing changes in his body in response to anxiety; these are voice changes, molar movements, and increasing or decreasing muscular tension and tone. These help the patient to new insights (Sullivan, 1945). But most of all Sullivan looks upon gesture as a method of eliciting the meaning of what a patient is communicating.

"Of the learning that goes on from the end of the first year, the immediately and vastly important congeries is the acquisition of overt behaviour which belongs to what might well be called two grand divisions of interpersonal communicative behaviour, namely, those of gesture and of language. In order to suggest the great importance of the gestural performance of speech, I might point out that it is only in quite restricted fields of living - for example, when a scientist is being a good scientist - that language behaviour is stripped of gestural components. Most people would find such rigidly defined language behaviour rather more soporific than communicative" (Sullivan, 1953, p. 178). Here he seems to be advocating a way of knowing and understanding which is non-scientific

Pre-language role of gesture:

Gesture can be broadly divided into two main groups (Critchley, 1939). One group has significance as being

universal, ancient, and capable of easy and obvious interpretation. They are described as being well adapted for the communication of simple propositions and themes of an emotional nature. Abstract considerations and ideas relating to times other than the present meet with more difficulty however and cannot be dealt with easily. This is 'instinctive' gesture and is regarded as being more primitive and more fundamental than the other - the symbolic. This is the conclusion that Critchley reaches after studying the evidence from children, from anthropological surveys and from comparative biologists. The two classes, that is the symbolic and instinctive, are often combined by, for example, deaf mutes who are thereby enabled to command a fairly adequate substitute for speech.

This instinctive type of gesture can be executed very rapidly and may often save a wordy circumlocution, and can express probably more advantageously than words the idea of size, shape, speed, approval or disapproval. Some concepts of a specialized nature can be described easily by gesture whereas words would be cumbersome and awkward - Critchley gives the example "spiral". Bacon first saw the need for a scientific dictionary of The Doctrine of Gesture and this century Paget (quoted by Crutchley) has indeed done something along these lines - he estimates that there are probably in the region of 700,000 distinct elementary signs.

There is so far no sign of this gesture language of his achieving common use in the sense that individuals always use such mechanisms in a highly individual way; the eventual result being variations on a basic theme. However there would seem to be universal acceptance of Critchley's conclusion that "gesture should be regarded as a very important modality of language, with origins at least as remote, and with great powers of enriching and enhancing our speech" (ibid.).

Gesture and Speech:

Linguists and philogists have been intrigued by the idea that language originated from gesture - speech can be considered as imitative (onomatopoetic) interjectional (reproducing primitive noises in a stylised way), or simply as phonated bucco-labio-lingual gestures (Paget, 1930). However that may be the interrelation of speech and gesture can be well studied in cases of neurological lesion. In focal cerebral lesions where aphasia is complete, pantomimic gestures are often retained in such a way that the patient can indicate certain simple needs and perhaps communicate elementary propositions. Even here though, the range of such gesture is reduced by the lesion (hypomimia) though always much less affected than speech itself. This is in accord with our general experience of neurological function, namely,

that the 'higher' a function ('higher' being approximately equivalent to but by no means identical with 'intellectual'), the more vulnerable it is to damage, whereas those functions which escape tend to be the more primitive, automatic and emotive acts, the less intellectual. Before leaving neurological concomitants of speech, it might be noted that blushing and similar autonomic phenomena which are properly classified as gesture within the meaning of the term as used here, have a more obvious physiological connection with the nervous system than other gestures.

Another para-language use of gesture is in rhetoric. This subject reached a high degree of development in ancient times and was included among the noblest of arts. Although it has been universally ignored and even distrusted for centuries, this did not prevent world tragedy, for the rhetoric and harangue of Hitler and Mussolini were at least partly responsible for carrying them into power, and many would say were at least partly responsible for sweeping the world into war. We still do not know the personality correlates of leadership. Equally so many would say that it was the leadership, based not least on his rhetoric, of Churchill that changed history. And although the modern mass communication media greatly increased the dissemination of their words, while reducing the range of the expressive movements described in classical rhetoric, nevertheless, they greatly increased the possibilities of such refinements of gesture as vocal

modulations, inflections, silences, and amplitude of range. And of course their hearers were moved by emotion not intellect. In more strictly semantic terms rhetoric might be regarded as the study of the adequate use of signs for the realization of certain purposes. Rhetorical discourse shows how "formative ascriptors" (Morris 1946) can be used to induce valuation and this use is as legitimate as any other, provided the matter is known to be such. This applies equally to the incitive use of gesture. There are many factors at work in distoring speech from simple symbolism, and the further it departs from it the less intellectual does it become.

This view is not shared by all writers. Sometimes gesture can sharpen a reference (Osgood, 1952). Ogden and Richards point out that it is easier to indicate an Antimacassar when one of these safeguards is present, than to describe one (p. 115). Elsewhere they discuss the more subtle propensities of gesture and the exactitude conferred by them, at least as an accompaniment to speech. "To suppose otherwise, is to neglect our subsidiary gesture languagues, whose accuracy within their own limited provinces is far higher than that yet reached by any system of spoken or written symbols with the exception of the quite special and peculiar case of mathematical, scientific and musical notations. Words, whenever they cannot directly ally themselves with, and support themselves upon gestures, are, at present, a very imperfect means of communication" (Ogden and

Richards, 1946, p. 15). Now this seems to represent the approach of Sullivan. This is, in fact, the reason for his close watch on the patient's gesture. In the next section we shall take the matter a little further.

Emotional Expression by Gesture:

Not only does one judge and interpret meaning by gestural concomitants, one also judges personality. Our judgment is probably a subtle interpretation of the context of the situation taking into account what is said, the way in which it is said, the personality of the speaker, the circumstances in which it is said, the possible motivations and the possible outcomes, and so on. Non-vocal signs, says Morris (1946, p. 195), occur in all modes of signifying and are used for all purposes. Speech is a delicate subtle and powerful form of behaviour; the way in which a thing is said is often as important as the message (Pear, 1931). Speech is an expression of personality. Voice qualities are said to have colour, form, "feel". As a form of gesture it is modified by society, by private dynamisms and it is variable through intonation, rhythm, and range of vocabulary. Personality can also be expressed by appearance, colouring, physique, clothes, odour, behaviour, gesture, manners. "If we are swayed by a certain thought or emotion, we may express ourselves with our hands, or some other type of gesturing, and we may say that a man conveys certain

impressions without being able to put our finger on the spot that led us to the judgment (as a dog knows to go right or left). We might well be mistaken if we tried to give reasons." (Sapir, 1926). Gestural language is said to have greater expressiveness and emotional release (Pei, 1952). Inclinations and moods are often apprehended in a quite direct way. Conversation, interjections, tones of voice gestures and facial expressions are seen and heard and 'understood'. There are ways of knowing which depend more on imitation than on education (Ryle, 1949, p. 115).

The interpreters of gesture speak with many voices and there is no unanimity. Ogden and Richards state that gesture makes meaning more exact and concrete. Sapir inclines to the view that gesture accompanies an emotional state. The most extensive study of gesture has been carried out by Allport and Vernon (1933), who industriously list upwards of 450 types and varieties of expressive movements, which cannot be defined and classified easily, for expression is not always confined to movement - postures, or cast of countenance, for example, are not movements, and yet form some of the best material for the study of expression. They start from the assumption that judgments of personality are inferential constructs based on our sensory perception of expression. It is only through our perceptions of the physical bodies, speech and gesture of our associates, that we

derive any knowledge of their natures. "Impression" is the perception and interpretation of behaviour by another (ibid., Introd. p. v.). There is a conviction that all mobile features of the body are avenues for the expression of personality. Their experimental results favour this hypothesis (ibid. p. 180).

A more biological opinion is held by Critchley (ibid), who follows Hughlings Jackson in comparing the relationship of pantomime to gesture with that of propositionising to emotional utterance. Gesture then is not pantomime and its significance is akin to an emotional utterance. This is a broad generalisation ahd there are times when expressive movements cannot readily be assigned to one or the other category. Withal it is a vague role of gesture which emerges. L'hermitte likens it to the shadow which accompanies the body (quoted by Critchley). No dictionary of signs exists in any pragmatic sense. Few attempts at analysis are on record, the great difficulty being the fleeting quality of the phenomenon to be observed. Yet, when we consider the use for psychotherapy of gesture as a means of communication, it is precisely the least exact, the expressive rather than the propositional, that is thus intended. Here is a fairly typical contribution from a follower of Sullivan. "The nature and strength of the client's feelings are conveyed by, and can be understood from his gestures, facial expressions,

bodily movement, tenseness of voice, mannerisms, verbal statements, and previous expressions. In addition to these overt responses, the client conveys feelings in subliminal cues. The therapist should attempt to respond to the totality of these cues, and must, to some degree, sense intuitively the real nature of the client's feelings. The client wants to feel that he is being understood, not that he is being given clearer understanding of himself. Real meanings lie in what is being totally experienced, not in what is said (Moustakas and Callahan, 1956). The philosophy here seems to be that the patient, by feeling that he is observed or accompanied in his "innermost places", is changed, because, as Kant said, the very fact of being observed, changes us.

The evidence then suggests that gesture is a rich channel of communication between individuals, and Sullivan must, as he certainly does, take cognisance of it in his system. The interpretation of the meaning content of gesture is, however, a very complex and highly individual matter. The problem, in fact, is intrinsically the same as the problem of words, as we have seen. Sullivan's answer would appear to be something like this - that although each signal and cue is inexact and, by itself, cannot be relied upon, yet, if the therapist is receptive enough and receives a very great number of signals, he is, on balance, more

likely to apprehend the significant content of the patient's communication.

## Chapter 9.

## COMMUNICATION - THE KINAESTHETIC MODALITY

Empathy:

Sullivan is probably the first psychotherapist to attempt to make serious use of the concept of empathy which has been established in psychology texts for many years. It is a means, and the earliest means of communication so it is seen maximally in mother-infant relationships. The infant experiences unpleasant visceral tensions arising from hunger and this tension is carried over into somatic display which the mother perceives. When nourished, the infant naturally shows some biological responses of satisfaction, which delights the parent, and is therefore conveyed back, by the empathic linkage, to the infant as good feeling and so he learns the power of different responses (Mullahy, 1945). To this earliest experience, Sullivan gives the name of prototaxic. Although he assumes its greatest incidence is from six to twenty seven months, he allows that it may persist into much later life in some individuals (Sullivan, The Concepts of Modern Psychiatry, p. 8). The exact means whereby empathy is conveyed is not clear and Mullahy (The Conceptions of Harry Stad Sullivan, p. 27), is rather uncomfortable with it. Although the fact itself may be well established, he says, it is not explained. However,

Fromm-Reichmann has few such reservations and she not only believes that empathy persists into adult life but makes free use of it in explaining the process of psychotherapy. She describes it as the emotional contagion or communion which exists between people outside the communication through sensory channels or through spoken words. This is not only a very unscientific statement but it is also illogical, implying extra sensory perception or some similar device. However an alternative form of the statement would be more acceptable and this will be advanced later. In discussing ethical standards she states that an empathic conveyance to the patient of the psychiatrist's standards plays an important role, as it does in many more areas of treatment (Fromm-Reichmann, 1953, p. 37). Elsewhere, she indicates that the psychiatrist "will have to depend on his empathic sensitivity to discern when such talk (gossip about the doctor's private life) is motivated by resistance and should therefore be stopped and interpreted, and when it constitutes the cautious attempt to resume interpersonal communication" (ibid., p. 113). But perhaps her strongest argument is drawn from the experience of the psychoanalysts who thought at one time that the intellectual application of the well defined technique of analysis was all that was necessary to effect a cure, but who now admit that a personal suitability of the therapist to the needs of the particular case is at

least equally important, or, in her words, there must be an empathic quality between the psychiatrist and the patient (ibid., p. 62). In investigating several non-Sullivanian types of therapy Fiedler found an increasing tendency to rely on empathic rather than intellectual understanding, but this seems to mean, he says, that the expert therapist is very sensitive to patient's communication (Fiedler, 1950 b).

Sullivan realises that in using the concept of empathy, he is crossing a logical gap:

> "I have had a good deal of trouble at times with people of a certain type of educational history; since they cannot refer empathy to vision, hearing, or some other special sense receptor, and since they do not know whether it is transmitted by the ether waves or air waves or what not, they find it hard to accept the idea of empathy. But whether the doctrine of empathy is accepted or not..... (and) although empathy may sound mysterious, remember there is much that sounds mysterious in the universe only you have got used to it; and perhaps you will get used to empathy" (Sullivan, 1953, p. 41.).

We will now pass on to a more detailed consideration of empathy and try to show that Sullivan was unnecessarily gloomy in his defence of it.

Psychophysiology of Empathy:

When any 'sixth' sense is postulated over and above the customary five, it is usual to include this or any more under extensions of 'feeling' and this means muscle bone and joint sense as well as touch, and other skin sensations. This kinaesthetic sensibility is usually thought of as crude and unorganized, nevertheless it is capable of quite exquisite

differentiation at times. For example, displacement through 0.2 degrees can be appreciated by the shoulder joint (Boring, Langfield and Weld, 1948). Now Wheeler and Cutsforth (1922) present experimental evidence to show that the act of perceiving has visual, auditory, and kinaesthetic qualities which constitute the development of meaning. Indeed for Wheeler, meaning seems to be essentially a kinaesthetic perception followed by a motor response. The motor response is an integral part of the cognitive process, and this is inseparable from a kinaesthetic feed-back. Later support for this contention comes from Gardner Murphy (1947 where in discussing the self as a perceptual structure which involves a motor disposition, he points out that visual and auditory aspects come first, as they often do in the simplest learning process, but this phase "presses forward into the motor phase, and the kinaesthetic follows to complete the picture". Now this kinaesthetic sense is, along with crude organic visceral sensation available to the organism from very early days of development, when indissociation and autism contrast with the dissociation and differentiatedness that make up adult awareness (Piaget, 1926, Murphy, 1947). "Indissociation implies a lack of distinction not only between external objects, but between the phases of the self; in particular, the absences of boundaries between such 'inner'

experiences as the kinaesthetic and organic on the one hand, and such 'outer' experiences as the visual and auditory on the other. There is as yet, no inner or outer, no self or not-self. The motor, and consequently the kinaesthetic tendencies follow the stimulus patterns without regard to their assigned states as your or my behaviour; empathy and mimicry follow channels of earlier experience without any need to ask whose effort or activity is in progress. This is the process of participation, the flow of experience which goes on before the dawn of self-hood" (Murphy, 1947, p. 382).

"Empathy is the imaginative transposing of oneself into the thinking, feeling, and acting of another" (Dymond, 1950). It is the capacity to take the role of the other person with whom one is socially implicated (Mead, 1934). "Empathy can be described as a process of 'projection' or 'introjection'; both are metaphors referring to the experience of partial identity between the subject's mental processes and those of another, with the resulting insight into the other's mental state and participation in his emotions. Empathy becomes sympathy when to the mental resonance is added the desire to collaborate or help" (Koestler, 1949).

Empathy as it is known in the psychological texts is this activity of 'feeling into' (einfuhlung) another

person and there is usually a motor accompaniment. Hence most texts carry pictures of athletes doing a high jump or making some supreme effort while the watchers in the background are photographed in the act of crudely copying his technique and are enjoying, albeit vicariously, his sensations. Even in reading a novel we identify to a certain degree with the characters and some of our pleasure comes from emphatically sharing their experiences. Thus empathy is also experienced in watching the graceful swoop of the swallow in flight and this leads us directly on to the role of empathy as a component of aesthetic appreciation (Woodworth and Marquis, 1949). Empathy is defined in the first instance by Murphy (ibid.) as direct apprehension of the state of mind of another person, and by extension to aesthetics it is also "attribution to a natural object or a work of art of the feelings or attitudes aroused in one by the surroundings (actual or depicted) of that object, as when a column seems to plant itself doggedly under a too heavy load as a man might do". Jacobson (1938) has given abundant experimental evidence that the idea of an act is accompanied by minimal myotonal changes in the appropriate limbs. There is here a small motor act with its 'shadow' the kinaesthetic response. Imitation and identification help us to "know".

Experimental evidence of such physiological concommitants of empathy in psychotherapy has also recently become available. (Malmo 1954, Coleman, Greebblatt and Solomons 1956). In addition, the work of Dixon (1955, 1956) on subception, has

shown that visual cues which are too weak to be consciously apprehended by the subject, can, nevertheless, significantly determine the responses of the subject. In listening intently to a speaker or a lecturer it is advantageous, Pear (1938) tells his students, to sympathise with his changing facial expressions and gestures, to try to live into the sounds and their meanings of his changing vocal moods, and to attend in such a way as though they intended to copy the sounds. "In such a way you may grasp primitively the speaker's point". In understanding, used in the meaning of apprehending or successfully interpreting a statement or a situation or a person, we use this direct method of finding out what is signified by a species of imitation. "I find out your inclinations and your moods more directly" says Ryle (1949). "I hear and understand your conversational avowals, your interjections and your tones of voice. I see and understand your gestures and your facial expressions. I say 'understand' in no metaphorical sense, for even interjections, tones of voice, gestures, and grimaces, are modes of communication. We learn to produce them not, indeed, from schooling, but from imitation" (p. 115).

To return now to aesthetic considerations where empathy has received more attention than it has in cognitive processes. It has been said that the projection by the artist of his experience evokes the more or less vivid revival

of it in ourselves. The artist selects in virtue of the impulses which his past life has developed in him. When we look at his work, we shall in many cases miss much that is essential unless we are able to react with similar impulses. This is imitatory, but Croce holds that a legitimate scientific meaning occurs when imitation is understood as representation or intuition of nature, a form of knowledge.

Now the therapist in empathically appreciating the state of mind of the patient is in a position to offer him new interpretations of the experience undergone, new ways of looking at what happened, new and undiscovered relationships of events and personalities and motives, and this will often be the therapist's conception, no matter how skilfully he may arrange matters so that it appears to be the patient who is himself making the interpretation. Compare this with the following description of the aesthetic experience. "We come into contact with the personality of the artist, because what he puts into his work is a selection made from an indefinitely large number of possible elements, and their specific arrangement is also only one of many possible. This selection and arrangement is due to the direction and accentuation of his interest - in other words, to the play of impulses which controls his activity at the moment; and it is often such that the same group of impulses are aroused in the spectator. We do not make the artist's selection because that is done for us. This seems to be the only way,

unless by telepathy, of coming into contact with other minds than our own" (my ital.) (Ogden, Richards and Wood, 1922, p. 37). If this is, indeed, a valid way of coming into contact with minds other than our own, it would seem to be unwise of psychiatry to neglect it. Thus, our moods, whether satisfaction or dissatisfaction, become visible as shapes or audible as sounds, and when this re-evocation of our past experience is harmonious as well as vivid, when this is such as to be favourable to our existence and in so far pleasurable, we welcome the form thus animated by ourselves as beautiful. Empathy has conditioned the being of art and can explain it. (Vernon Lee, 1913, Ch. IX). There is no question but that in empathy there is a 'going over' of the self into the object with varying degrees of merging (einfhulung in its reflexive form) though Lipps seems to have contended that if empathy was in progress, we could not be aware of the inner imitation or muscular movements which accompany the process. Nevertheless, the view is taken here that the experimental work of Jacobson, Mahmo, Dixon, Coleman, et al., Wolff, et al., qualifies this statement of Lipps. Because an event cannot be brought into consciousness by taking thought, is no argument against its existence. What is certainly agreed by all is that throughout this discussion of empathy we are in the field of emotionalism with its somatic concomitants where the traditional boundaries between what is psychological and what is physiological are most blurred if indeed it is valid to speak of them as existing at all.

Whatever be the final judgment on the physiology of such states, it seems clear enough that imitation, whether in fact or in fantasy, is a valid route of knowing or understanding. Nevertheless, such a hold does physiology have upon us and such advantages does the 'real' enjoy over the purely 'mental' that we long for the respectability of biological measures. "Exactly as an individual puts himself in another's place, assumes his spatial position and its appurtenances, glows with his pride, suffers in his embarrassment - so he puts himself in the place of the pillar, etc., is pulled away by the Picasso painting, muscles tighten as he watches the tug of war; larynx tires and heels rise as the soprano strains upward. It is satisfying to the little man to put himself in the shoes of the great as he listens to the dictator's speech and moves with his movements, and the climber melts into the vast ruggedness of the peak. Empathy here is of the broadly sensory sort; the individual needs nothing more" (Gardner Murphy, 1947).

Synaesthesia:

Having gone thus far along the road to aesthetic appreciation with empathy, because there is no doubt that aestheticians are on the whole rather happier with the concept of empathy than biologists are, let us now consider the allied phenomenon of Synaesthesia, which seems to attract little attention and is regarded as something of an academic and

unpractical curio. But I hope to show that synaesthetic experiences are a means whereby the development of empathy can take place in a relationship - empathy which, as we have seen, is greatly valued in Sullivan's psychotherapy. In its narrow sense Warren defines it as a "phenomenon characterising the experiences of certain individuals in which certain sensations belonging to one sense or mode attach to certain sensations of another group and appear regularly whenever a stimulus of the latter type occurs" (Warren, 1934). The classical example is coloured hearing (Langfield, 1914) and many other cases have since been described. Another example is of a man who regularly reported pressure sensations about his teeth and cheeks whenever cold spots on his arms were stimulated (Dallenbach, 1924). Wheeler and Cutsforth (1922) report coloured feeling instead of the usual kinaesthetic response in recognising a number in Braille type presentation where the subject has habitually learned ways of knowing when the visual route is permanently unusable. It appears that a sort of "neural short-circuiting" is implied (Osgood, 1952). But in further experiments, mainly on college students, Karwoski and his co-workers have shown that other more complex sensory modelities are crossed - they used colour-music synaesthesiae in their investigations and found that far from being a rare phenomenon, as many as 13% of the subjects consciously use colour-music synaesthesia to enhance their enjoyment (Karwoski

and Odbeit, 1938). They liken this to the process of metaphor in language, and in this sense synaesthesia can be described as the parallel alignment of two or more dimensions of experience, defined verbally as pairs of polar opposites, with translations occurring between equivalent portions of the continua (Karwoski, Odbeit and Osgood, 1942). For example, a happy man is said to feel "high" while a sad man feels "low", hope is "white" while despair is "black". If we seem now to be moving into the realm of poetry, a more sober statement is the conclusion reached by Wheeler and Cutsforth who set out specifically to investigate synaesthesia and meaning, namely, that synaesthesia is an important step on the road to apprehending, that it is an integral part of cognitive processes, and these phenomena not only serve as substitutes for other imaginal processes in acts of recognising, but also function as substitutes for feelings of familiarity. They function both as general and as specific labels for objects to be recognised. These analogies between any varieties of sensation are probably very thorough-going: "Delicate patterns of perception may be involved in such a way that one may conceive of them as moulds into which one may run any sensory material whatever. This curious cross circuiting of the senses is known as synaesthesia" (Pear, Remembering and Forgetting, 159, 953, 374).

However, it is in the realm of artistic creativity that the psychologist finds the richest use of the synaesthetic

concepts. Synaesthesia, says Downey in tackling this problem (Downey, 1929), is a confusion of sense modalities in which one sensation is reported in terms of another sensation (gustatoty audition, tonal vision, audition colourée). Now it may be explained by:

(1) Association of things conjoined by experience or of common emotional toning, but (a) the vividness may be an actual sensation, and (b) the secondary sensation is not within the control of the person experiencing it.

(2) Reversion to a more primitive nervous condition before clear-cut sense distinctions had been evolved. (This is strongly reminiscent of Sullivan's concept of empathy and what he calls protopathic experience).

(3) Privileged pathways in the brain.

(4) Such pathological symptoms as hallucinations, psychic dissociation, and the freak of memory called eidetic imagery. This latter category has become very familiar of late, since the work of Penfield and Jasper (1954) has shown how closely related are the functions of memory and vivid sensory experience in the temporal lobe of the brain.

Experimental studies have been carried out by Sterzinger (quoted by Downey) into the moment of aesthetic enjoyment and

he concludes that empathy (einfuhlung) is of relatively less significance than substitution of meaning (unterschiebung) as it occurs in the metaphorical consciousness. Those among his subjects who were unable to achieve substitution even under instruction, were, Sterzinger asserts, noticeably matter of fact and prosaic in temperament. By means of his conception of substitution, Sterzinger is able to explain the effect of literary synaesthesia and the quality of dreamlikeness that is so pronounced a feature in the enjoyment of poetry by certain subjects.

This togetherness and concordance of the senses offers synaesthesia as a suitable mode of expressing the doctrine of equilibrium and harmony which has been suggested as the foundation of aesthetics (Ogden, Richards and Wood, 1922). Its role is a key role. "In virtue of what we have called the synaesthetic character of the experience, we are enabled, as we have seen, to appreciate relationships in a way which would not be possible under normal circumstances. Through no other experience can the full richness and complexity of our environment be realised. The ultimate value of equilibrium is that it is better to be fully, than partly alive" (p. 91).

There are manifestly differing states of awareness - simple perceptual activity such as glancing at the clock, simple emotional experiences such as a mild surprise in which

intellectual activity is hardly discernible; but unintellectualised states may also be complex, as in aesthetic contemplation, where we are experiencing the peculiar fusion of impulses formed by and representing our own past experiences with those of the artist in a new complexity and richness and immediacy. Memory here is acting diffusely and widely and is not canalised on to a particular issue. The repose induced by such states resembles the satisfaction and repose which follows a successful intellectual effort, and they have therefore been called 'states of knowledge'. Now the term knowledge is ill-chosen here because it attempts to usurp the power which the word 'knowledge' always evokes. It is misleading and dangerous to use the evocative advantages of certain terms when symbolic considerations are foremost. Failure to distinguish between the symbolic and the emotive uses is the source of much confusion in discussion and research. The singularity and peculiarity of the aesthetic state is the great width and range of the attitudes evoked. Aesthetics properly concerns itself with the description and ordering of such attitudes.

Synaesthesia has been discussed in its most intense form. Less intense, but appreciably the same and comparable experiences occur in psychotherapy, and it is on such occasions that the relationship between doctor and patient is engendered and by them it grows. Everyone who has carried

out psychotherapy will recognise the state which exists when a patient stumbles towards a new insight, overcomes his resistance and admits his guilt, or reaches a point where he can turn a critical eye on something or someone previously held inviolate, or see a new and significant relationship between events which had previously eluded him. It is of such situations, such points of departure that Sullivan frequently says: "This was the starting point for a new advance in therapy".

The psychiatrist, in his role of participant observer, makes use of his acutely developed perceptions - which, as we have seen include sense data obtained (a) objectively, from listening to and looking at the patient, and (b) subjectively, from his empathic and reciprocal experiences - to achieve this synaesthetic experience. Since this is inconceivable without the patient's participation, the patient will necessarily experience the state also. It occurs against the background of the personalities involved; the attitudes of the participants, the life history laid bare, the past sufferings and uncertainties, the whole context of the therapeutic relationship. The moment of insight embraces a combination or collection of elements of experience of the poet or artist or therapist (Wilson, 1954). "The indirect means of arousal which are possible through words need not be dwelt upon here at length. Through statement; through the

excitement of imagery; through metaphor itself - used not, as in strict symbolising, to bring out a stress or a structural feature in a reference, but rather to provide, often under cover of a pretence of this elucidation, new, sudden, and striking collocations of references for the sake of the compound effects of contrast, conflict, harmony interanimation and equilibrium which may be so attained, or used more simply to modify and adjust emotional tone; through association; through revival; and through many subtle linkings of mnemic situations, words are capable of exerting profound influence quite apart from any assistance from the particular passions, needs, desires, or circumstances of the hearer. With the further aid of these, there is, as has often been illustrated in history, no limit to their evocative range" (Ogden and Richards, 1946, p. 240). It is reasonable to suppose that the needs of Appel's patient were met in this way (cf., Ch. VI) and that therein lies the explanation of the 'cure'.

If it be thought that these matters belong only properly in the province of the artist, other branches of learning do not agree that he alone has the right of creator. The historian claims that by selective interpretation of the past, he creates in us an awareness of our society and our own nature. Wise action depends on sound judgment, the only genuine guide to which is an understanding and knowledge of the world and ourselves (pieter Geyl, 1955). Art, no less

than psychotherapy, sees itself as a means of establishing relations with personalities not otherwise accessible. And, outstandingly it offers its own unique powers of bridging the gulf which separates us from men of different race and culture, especially of civilizations long past dead. This is the educative value of art (Ogden, Richards and Wood, 1922).

There are ways of knowing apart from what we call the logical, though it must be always our task to attempt to convey these in reasonable, possibly in scientific, terms. It is by all means justifiable for Appel to relieve his patient by reading her literature, but the onus lies upon him to explain what has transpired, if the sum of knowledge is to be advanced and if others are to attain all the techniques of psychotherapy. In a poem we shall look in vain for its logical harmony, its rationality and unity. The insistent demonstration of logical incongruities, and the detection of irrationalities may indicate merely the limitations of the individual reader or listener. "Synaesthetic phrasing" and metaphorical expressions and sonorous cadences have an aptness which may be outside the range of appreciation of those who too easily dismiss them on logical grounds. Thus synaesthesia is a means to that empathy which we have seen to occur in many walks of life, in psychology, in art, and is highly valued by Sullivan in psychotherapy. It forms part of his theory of communication in his interpersonal situation, and constitutes

much of what he calls the prototaxic mode of experiencing.

The goal of psychotherapy is most often described as 'adjustment', 'adaptation' or even 'homeostasis', or some such term implying harmoniousness of the internal emotions with the external environment. Confucius had a similar ideal - "When anger sorrow joy pleasure are in being but are not manifested, the mind may be said to be in a state of Equilibrium. When the feelings are stirred and cooperate in due degree, the mind may be said to be in a state of Harmony. If both Equilibrium and Harmony exist, everything will occupy its proper place, and all things will be nourished and flourish. To this attainment there is requisite the extensive study of what is excellent, accurate enquiry about it, careful reflection on it, the clear discrimination of it and the earnest practice of it" (from the Chung Yeng, quoted by Ogden, Richards and Wood, 1922).

## SUMMARY OF CHAPTERS.

### Chapter 1. ROLE OF PSYCHOTHERAPY IN MEDICINE.

Biological and scientific medicine has its limitations as evinced in its increasing need for psychiatry. Psychiatry, in its turn, finds it impossible to be exclusively biological and needs psychotherapy. Psychotherapy takes place whenever a doctor and a patient strike up a relationship. This introduces the "subjective" into a field where "objective" - the hallmark of the exact sciences - has, of late enjoyed almost exclusive emphasis. This is one source of the doctor-patient relationship in general medicine.

### Chapter 2. STRUCTURED ASPECTS OF THE PSYCHOTHERAPEUTIC SITUATION.

Observations on reciprocal functioning of patient and doctor occur in Hippocratic writings. Social scientists view the doctor-patient relationship as a social system in which their sentiments are involved and are likely to be powerful determinants of the outcome. Even in science Polanyi shows how powerful the passions are. Social science also indicates certain social constraints on the roles of therapist and patient. These constraints are implicit applications of society and are separate from medical ethics. Some mutual expectations of doctor and patient are also given.

Chapter 3. TECHNICAL PROCEDURES IN PSYCHOTHERAPY.

In Sullivan's theory the doctor-patient relationship is a communication system; mental illness in its broadest sense can be recognised as disturbances in the relationship, evidenced by distortion of communication. The role of the therapist in this system is compared with the authoritarian figure of earlier therapies, the passivity of the classical psychoanalyst, and contemporary views on the matter, which are, in places, tending to the mystical. The kind of exchange and transactions which take place in this particular interpersonal relationship are considered. Various explanations of the dynamics of the cure in psychotherapy are examined and there is a consensus of opinion that a good relationship is mandatory.

Chapter 4. PSYCHOTHERAPY AND SCIENCE.

Because of early criticism and because of the high emotive value of the word science at the time of its birth, psychoanalysis was obliged to offer itself in a scientific manner, if it were to gain acceptance. It was couched in the terms of the natural sciences. Its critics do not deny that the consulting room is a valid laboratory, but on the whole they fail to find convincing scientific evidence for psychoanalysis. Nevertheless, the rise of psychoanalysis was steady, but its present status seems to indicate that it has passed its zenith, though some abiding principles are likely to

remain. Some attempts have been made to construct systems of psychotherapy on two schools of behaviourism which are scientifically "correct" (Hull and Pavlov), but only the beginnings have appeared. There is therefore in existence no psychoterapy which is universally agreed to conform to the laws of the exact sciences.

Chapter 5. SCIENTIFIC TRUTH AND POETIC TRUTH.

Newtonian physics and logical positivism have lost their dominant place in the philosophy of science and relativity theory has reintroduced multiple causation. There is a new complexity in science and psychologists, philosophers, biologists, social scientists, and psychiatrists have had to rethink their basic postulates of causal theory. Thus operationism was particularly congenial to Sullivan's theory of interpersonal relationships. The old laws of physics were inimical to the humanistic sciences, but there are serious objections to the whole principle of applying even the new physical laws to these fields also. The field of science is partly overlapped by aesthetics, the traditional humanist science, and in these communal higher reaches we have the phenomenon of outstanding scientists giving aesthetic reasons for their work. There is a poetic truth as well as a scientific truth. Windelband suggests 'idiographic' and 'nomothetic' disciplines as suitable descriptions for the corresponding two divisions of psychology. Passion and controversy have a logical function and are indispensable elements of science.

Chapter 6. PSYCHOTHERAPY AND ART.

The sphere of activity of psychology and psychotherapy on the one hand, and art on the other, coalesce at many points. Man occupies a central position in both. The visions of the artist are comparable to the insights of the therapist. The function of art is not dissimilar to that of psychotherapy. Anticipation of 'lust-unlust' and abreaction can be found in Wordsworth a hundred years before Freud. Turning to Sullivan's work, examination shows that some central mechanisms of the interpersonal theory of psychiatry are closely paralleled by Croce's teaching of aesthetics. Prinzhorn finds in the aesthetic dimension the Eros paidogogos which added to the scientific knowledge enables the therapist to encompass the cure.

Chapter 7. COMMUNICATION - THE AUDITORY MODALITY.

Adequate communication is essential to the solution of any problem, but it should not be too easily assumed that the establishment of good communication leads to cooperative endeavour and success.

Communication is to a considerable extent verbal and British and American authorities are unanimous in pointing out the inexactness of speech and the complexities that make a "person" language inimical to the exchange of scientific information. Mechanical calculating devices and computers show how such information will have to be structured.

Language is however not merely the tool of thought. It imposes its own pattern on thought through its cultural origins. In addition to being an exchange of information, language is also a way of behaving. Many words have more emotional than intellectual significance. This is the evocative function of language. Much of Sullivan's verbal behaviour is evocative, even romantic. Vocal tone also influences meaning appreciably; and interpersonal psychiatry, realising this, freely interprets voice modulations as gesture.

Chapter 8. COMMUNICATION - THE VISUAL MODALITY.

Sullivan makes wide and extensive use of gesture as an aid to meaning. Gesture can be classified into two subgroups (a) an ancient or instinctive use which is near to being universal and which is suitable for simple propositional exchange and is eloquent for themes of an emotional nature. There is also (b) symbolic use of gesture but this is not such highly intellectualized symbolism as speech, as neurology shows that it is organized at a lower cerebral 'level'. Related to this symbolic use of gesture are the embellishments of rhetoric. The main experimental work indicates that gesture is emotional expression and though relatively constant in the individual, there is nothing approaching an agreed universal dictionary for its interpretation.

## Chapter 9. COMMUNICATION - THE KINAESTHETIC MODALITY.

Sullivan makes use of the concept of empathy to explain communication between mother and infant during the earliest months of life; he calls this earliest mode of experiencing 'prototaxic' and, to a varying extent, empathy remains as a means of communication in adult life. Empathy is psychologically defined as 'feeling into' another person's experience in order to apprehend it. Experimental work indicates that the physiology of the state is subliminal, but this has a significant influence on cognitive processes nevertheless. Thus empathy can range from simple identification, as in, say, sport, to complex forms of appreciation and understanding of the aesthetic experience. To these more complex forms of empathy the name Synaesthesia is more appropriate, and many examples of synaesthesia can be found in the literature of aesthetics. It is often described as a "state of knowledge", but this terminology is deceptive for it cannot be substantiated in logical terms. What is indisputable is that it is an emotionally toned experience of a harmonious kind arising from the concordance of sense data. Such experiences can and do powerfully occur and mark points of departure in the course of successful psychotherapy.

## EPILOGUE

In the Interpersonal Theory of Psychiatry (p. 13), Sullivan defines psychiatry as the expanding science concerned with those events and processes in which a psychiatrist participates while being an observant psychiatrist. At one time he tells us he regarded psychiatry as the art of observing and perhaps influencing the course of mental illness. But he and his co-workers constantly felt the need to get away from the word 'art' which seemed to imply a mysterious process overlaid with intuition, a subject which was personal and intuitive, and somehow obscure. As such it was not open to observation and description, and being "unscientific" it was therefore "insignificant". It was understandable enough for them to want to find a scientific basis for their thinking, and this was easily enough come by in the developments in physics which have followed, this century, from Relativity Theory. Field Theory and Operationism represent two such developments but when such argument is extended to include other principles such as quantum theory or the indeterminancy principle, the validity of any such transfer of method at all becomes suspect. The easiest criticism of Sullivan's claim is of course the language one. Language is the methodology of psychotherapy.

According to Woodger's Tarner lectures there are four different ways of using language (the physical, the

sensible-object, the personal, and the community). If one wishes to remain in the physical sciences, one must confine onself to the language of the physical sciences - it is not permissible to mix the modes indiscriminately. It is necessary therefore to define the laws governing the use of language in the service of science. This is the goal of the Boole-Frege movement which offers guidance for the construction of such a scientific language.

Examination of Sullivan's language behaviour shows that he operates almost exclusively in the personal and community modes, indeed it is impossible for him to do otherwise, for many of his concerns, especially the emotions and motivations of people, are not expressible in the abstractions of physical language. It would be better, for the future, to eschew the use of the term "science" to his psychiatric theory. Such intellectual honesty would spare him the obloquy of using a word of great power to which he had no clear right, and thus avoid a weakness of psychoanalysis. As Ryle says, in order to solve anagrams we have to be able to spell and to count, but no one would call this science without grotesquely overtaxing the word. The eminent Jung had no need to claim his system to be science.

Aesthetics:

In interpersonal language behaviour the criterion is not rationalism but success. The goal of human communication

is the satisfaction of human needs which may be (1) biological, and therefore conform to universal laws, but are also (2) suprabiological and individual for which universal laws are still unknown. According to Woodger, systems of sentences which cannot be known to be true but which are helpful in promoting the satisfactions of needs can be called acceptances. These apply to politics, economics, aesthetics, etc., but an acceptance, successful for one need, may be inapplicable to another need. Many people still do not recognise that science may not solve all our needs. By being a participant observer, Sullivan's psychiatrist depends on two main sources for his information - by participating, he "experiences", and in observing, he uses his "senses". Now Spearman (1923), in his evaluation of the principles of cognition makes experience his starting point, in the sense that anything experienced is that which is lived, undergone, enjoyed and the like - the knowledge is inherent in the experience. For example his first cognitive principle reads as follows - "any lived experience tends to evoke immediately a knowing of its direct attributes and its experiencer" and Sullivan openly acknowledges his debt to Spearman and the influence of the latter in his thinking (Interpersonal Theory of Psychiatry, pp. 27-28). Now this Apprehension of Experience can be as easily stated in a theory of aesthetics, say Croce's, as in physical theory, and there is more justification for it, for

both artist and psychologist are dealing with people while the physicist is not. Interestingly enough, it is just in this field of sense datum that Spearman toyed with the Greek words παρακολουθησις (parakolouthesis), and συναίσθησις (synaesthesis) before deciding on 'apprehension' of experience. So near was "synaesthesia" to gaining a permanent place in the principles of cognition. Aesthetics is the science of sensuousness corresponding to logic as the science of conceptual understanding. Elsewhere, in studying the nature of creativity in aesthetics, Spearman (1930), explains the creative mind in essentially the same terms as those he elaborated for general psychology. He concludes that at bottom, the study of creativity and general psychology are the same. Empiricism has always relied on the senses, and the hope of a science of man's behaviour for the future is that it will integrate with "older insights of an intuitive or poetic sort, which, though pointing the way, will reach effectively into the unknown only when supported by the methods of a future science" (Murphy, 1947, p. 925). But Sullivan's principles will be valid even when the science of communication reaches its fulfillment with computer development, as now seems inevitable. For the most complex machine needs adequate information or sensory input - otherwise it cannot begin to function. The wide and extensive use of the senses advocated by Sullivan in

psychotherapy brings ways of knowing which are at present more adequately understood by the artist than the scientist. And no one need spurn such uses of the senses as intuitive or unknowable, because, as Thouless holds, "the teaching of aesthetic appreciation will best be done by a teacher who has a real appreciation of, for example, poetry himself. He will read it in such a way that his own reaction to it appears in his voice. One by one his pupils may experience for themselves the glory that he himself experiences. Their taste will be limited and imperfect to begin with, but it will be real sensibility; they will be in process of becoming real appreciators and not critics" (Thouless, 1951).

Humanism:

As Freud's great contribution to psychotherapy was the application of cause and effect concepts, even in unlikely situations, and clearly there was nothing new in cause and effect, so Sullivan's contribution is the rediscovery of the doctor-patient relationship. This is especially recognised by mental hospital psychiatrists who can appreciate in his writings, the practical life experience of one who shared in this type of work for many years, unlike so many who exist solely in the artificial microcosm of research, and whose clinical responsibility is minimal; or whose practice leads them to deal with a small number of patients of a highly specialised type. Ferenczi (1926) and Suttie (1935) often said that the patient was cured by the love of the doctor. The

strict biologist Woodger states that psychotherapy is only an overcoming, or a means of overcoming of the barriers to loving and being loved, and although there has grown up a new subdivision of medicine as a result of this rediscovery, we ought not to be impatient at the slowness of its growth. As he says, the history of the experimental method itself, now in its high summer, shows that it took some two hundred and sixty years to establish itself. Its history is the story of the discovery of the ecology of scurvy.

Meanwhile, as a practical method, relationship psychotherapy must forfeit its claim to being 'scientific' in the way in which this word is used in physics and chemistry, but there are adequate grounds for recognising that the aesthetic dimension is a valid sphere in which such a physician may operate; for there are many weighty authorities giving support to the view that in a system of perception-intuition-expression-relation lies the source, possibly the main source, of the physician's power to heal.

Sullivan a Pioneer of Monism:

Although the main burden of the present thesis has been to show that Sullivan has more in common with the science of aesthetics than with the physical sciences, yet he does not fail to make use of much knowledge that can properly be termed scientific, particularly material drawn from biological and social science. If such a mixture of science and

aesthetics appears to be impure, this may only be due to present day prejudiced dualistic thinking. Others have found the discrepancy between the teaching and practice of medicine stultifying, for medicine is taught as if patients were abstract notions of body. This arose through Cartesian dualism and (a) this dualism implies that mind is a vague appurtenance of body, and (b) the prestige of physical sciences is such that it hangs over our practical activities "like a mushroom shaped cloud" (Woodger, 1952). Such prestige makes workers in other fields fearful of not copying their methods. But dissatisfaction with traditional methods and traditional language will be essential if psychiatry is to grow. There is a need for a predualistic language which will deal with the person as a whole. Present day neurophysiology shows equal dissatisfaction with dualism (O'Leary, 1956):- "the visceral brain is not unconscious but rather eludes the grasp of the intellect because its animalistic and primitive structure makes it impossible to communicate in verbal terms". Relationship therapy and supportive measures might achieve much before proceeding to verbal methods of insight therapy (McLean, 1949).

More than any other medical thinker since Freud, Sullivan has emerged as the author of a monistic philosophy. It seems that only be escaping from cartesian principles and learning to think in terms of monism, will future advances in

medicine and psychiatry be brought about.

Conclusion:

Our conclusions, then, are that there are many ill-defined social, cultural and historical factors contributing to the doctor-patient relationship, but these are piecemeal and fragmentary and cannot be said to form a coherent body of thought. Sullivan's definition of the relationship as communication, limits the concept to the transactions that take place in the interview and these have been reclassified in terms of the sensory modalities. Though some of these categories can be shown to be less idealistic than their originator feared, and evidence is available for the existence of physiological accompaniments during these exchanges, yet his referents and data are, as symbols, too inexact to be admitted as logical in any philosophic or scientific sense. This is in keeping with the great difficulties that semantics itself experiences in dealing with 'the logical'. Although scientific medicine consists in the application of the principles of biology, men and women have, in addition, suprabiological needs. The doctor-patient relationship is an acceptance (in Woodger's terminology) which not only psychiatrists, but all physicians make use of in meeting such suprabiological needs encountered in therapeutics.

## BIBLIOGRAPHY


Affleck, J.W. (1947) The chronic sick in hospital - a psychiatric approach. Lancet, i, pp. 355-359.

Alexander, F. Psychosomatic medicine - its principles and applications, London, Allen & Unwin, 1952.

Allport, G.W. Personality, London, Constable & Co., 1938.

Idem., & Vernon, P.E. Studies in expressive movement, New York, Macmillan, 1933.

Appel, K.E. (1954) The present challenge of psychiatry, Amer. J. Psych. III, 1, pp. 1-12.

Ashby, W.R. Design for a brain, London, Chapman & Hall, 1952.

Auden, W.H. Making, Knowing and Judging, London, Clarendon Press, 1956.

Balint, M. (1954) Training General Practitioners in Psychotherapy, Brit. Med. J. 1, pp. 115-120.

Balogh, M. (1956) New Statesman & Nation, LII, 1325, p. 135.

Barbara, DA. (1956) Value of non-verbal communication in personality understanding, J. Nerv. Ment. Dis., 123, pp. 286-291.

Barraclough, W. (1937) Mental reactions of normal children to physical illness, Amer. J. Psych., 93, pp. 865-877.

Batchelor, I.R.C. (1953) Hysteria, Brit. Med. J., i, 1041-1043.

Bennett, A.E., Ford, F.R. and Turk, R.E. Clinical investigation of chlorpromazine and reserpine in private psychiatric practice, Amer. J. Psychiat., 112, pp. 782-787.

Bennett, E.A. (1953) The Anxiety State, Brit. Med. J., ii, pp. 554-555.

Bernard, J. (1949) The Art of Science, Amer. J. Sociol, 55, pp. 1-9.

Birks, W. (1956) Towards a science of social relations, Brit. J. Phil. Sci., VII, 26, pp. 117-128.

Boring, E.G., Langfield, H.S. and Weld, H.P. Foundations of Psychology, London, Chapman and Hall, 1948.

Boulding, K.E. (1956) Economics and the behavioural sciences - a desert frontier? Diogenes, 15, pp. 1-14.

Bridges, J.W. (1945) Personality as a work of art, Psychol. Rev. 52, pp. 320-323.

Bridgman, P.W. The Logic of Modern Physics, New York, The Macmillan Co. 1927.

Idem. (1945) Some general principles of operational analysis in "Symposium on Operationism", Psychol. Rev. 52. pp. 246-249.

British Med. Jnl. (1956) i, pp. 969-970.

Bronowski, J. The Common Sense of Science, London, Heineman, 1951.

Brown, G.B. Science - Its methods and philosophy, London, Geo Allen & Unwin, Ch. VII, 1956.

Brown, W. (1920) The revival of emotional memories and its therapeutic value, Brit. J. Med. Psychol., 1, pp. 16-19.

Browne, Sir Thos. Religio Medici, Cambridge University Press, 1953.

Cantril, H. The "Why" of Man's Experience, New York, Macmillan, 1950.

Caudill, W., Redlich, F.C., Gilmore, H.R., and Brody, E.B. (1952) Social structure and interaction processes in a psychiatric ward, Amer. J. Orthopsychiat., 22, 2, pp. 314-333

Idem. Applied Anthropology in Medicine, in "Anthropology Today", ed. A.L. Kroeber, Chicago, University of Chicago Press, 1953.

Cohen, M.B. in Introduction to The Interpersonal Theory of Psychiatry, H.S. Sullivan, ed. by H.S. Perry and M.L. Gawel, New York, W.W. Norton, 1953.

Cole, L.E. (1951) Metapsychology and the right to believe, Amer. J. Orthopsychiat, 21, 3, pp. 461-471.

Coleman, S., Greenblatt, M., and Solomon, H.E. (1956) Physiological evidence of rapport during psychotherapeutic interview, Dis. Nerv. Syst., 17, pp. 71-77.

Cowden, R.C., Zax, M., and Sproles, J.A. (1955) Reserpine - alone and as an adjunct to psychotherapy, Arch. Neurol. Psychist,, 74, pp. 518-522.

Critchley, M. The language of gesture, London, Edward Arnold, 1939.

Croce, B. Aesthetic, London, Vision Press, 1953.

Dallenbach, K.M. (1926) Synaesthesia - Pressury cold, Amer. J. Psychol. 37, pp. 571-573.

Darwin, C. The expression of the emotions in man and animals, ed. F. Darwin, London, Murray, 1904.

Davis, T.K. (1938) Sounds in language, J.Nerv.Ment.Dis. 88 pp.491-499.

Dewey, J., and Bentley, J.F. Knowing and the known, Boston Beacon Press, 1949. (quoted by Spiegel )

Dickinson, G.L. A Modern Symposium. London. Allen & Unwin 1930.

Dingle, H. (1938) Science and the unobservable, Nature, 141, pp. 21-28.

Dixon, N.F. (1955) The effect of subliminal stimulation on cognitive and other processes, Ph.D. Thesis, Univ. of Reading.

Idem. (1956) Symbolic Associations following subliminal stimulation, Int. J. Psychoanal., 37, pp. 159-170.

Dollard, J., and Miller, N.E. Personality and Psychotherapy, New York, McGraw Hill, 1950.

Donnelly, J., and Zeller, W. (1956) Clinical Research on chloropromazine and reserpine in State and private psychiatric hospitals, Digest Neurol. Psychiat., p. 373, Series XXIV.

Drever, J. — A Dictionary of Psychology, Harmondsworth, Middx., Penguin Books, 1952.

Dymond, R.F. — (1950) Personality and Empathy, Jnl. Consultg. Psychol., 14, pp. 343-349.

Eddington, A.S. — The Philosophy of Physical Science, Cambridge University Press, 1939.

Ellis, A. — (1950) An Introduction to the principles of Scientific Psychoanalysis, Gen. Psychol. Mon., 41, pp. 147-205.

Eysenck, H.J. — (1942) An experimental study of the 'good gestalt' - a new approach, Psychol. Rev., 49, pp. 344-364.

Idem. — (1952) The Effects of Psychotherapy, J. Consltg. Psychol., 16, pp. 319-323.

Feldman, P.E. — (1956), The personal element in psychiatric research, Am. Jnl. Psychiat., 113, pp. 52-54.

Ferenczi S. — Further contribution to the theory and technique of psychoanalysis, London, Leonard and Virgina Wolff, 1926.

Ferguson, R.S. — (1956) The Doctor-Patient Relationship and "Functional" Illness, Practitioner, 176, pp. 656-662.

Idem. — (1956) A Clinical Trial of Reserpine in the treatment of Anxiety, J. Ment. Sci., 102, pp. 30-42.

Fiedler, F.E. — (1950 a) Concept of the Ideal Therapeutic Relationship, J. Consultg. Psychol., 14, pp. 239-245.

Idem. — (1950 b) A comparison of therapeutic relationships in psychoanalysis, non directive, and Adlerian Therapy, ibid., pp. 436-443.

Frank, L.K. — (1953) Psychocultural Approaches to Medical Care, Jnl. Soc. Issues, Vol. 8, No. 4.

Fraser, G.S. — **Poetry now. London. Faber & Faber 1956.**

Freud, S. — An Autobiographical Study, trans. J. Strachey, London, Hogarth Press, 1942.

Idem. (a) Collected Papers, Vol. I, p. 250, London, Hogarth Press, 1948.

Idem. New Introductory Lectures on Psychoanalysis, London, Geo Allen & Unwin, 1949.

Idem. (b) Collected Papers, Vol. 4, p. 14, London, Hogarth Press, 1948.

Idem. Transference - A General Introduction to Psychoanalysis, New York, Liveright, 1935.

Idem and Breuer, J. Studies in Hysteria, Vol. II, The Complete Works, London, Hogarth Press, 1955.

Freudenberg, R.K. (1947) Ten years experience of insulin therapy, J. Ment. Sci., 93, pp. 9-30.

Fromm, E. Man for himself, London, Routledge & Kegan Paul, 1950.

Fromm-Reichmann, F. Principles of Intensive Psychotherapy, London, Geo Allen & Unwin, 1953.

Galdston, I. (1953) Dynamics of the Cure in Psychiatry, Arch. Neurol. Psychiat., 70- pp. 286-298.

Geyl, P. Debates with Historians, London, Batsford, 1955.

Goldstein, K. The Organism, New York, American Book Co., 1939.

Haldane, J.S. The Sciences and Philosophy, Gifford Lectures, University of Glasgow, 1927-8, Hodder & Stoughton.

Hardy, G.H. A Mathematician's Apology, Cambridge, University Press, 1940.

Henderson, L.J. (1935) Physician and Patient as a Social System, New Eng. J. Med., 212, p. 819.

Hill, D. (1954) Psychotherapy and Physical Treatments, J. Ment. Sci., 100, 419, pp. 360-374.

Hinsie, L.E., and Shatzky, J. Psychiatric Dictionary, New York, University Press, 2nd Ed. 1953.

Hippocrates The medical works of Hippocrates, ed. J. Chadwick and W.N. Mann, Oxford, Blackwell, 1950.

Hoch, P.B. (1956) Arch. Neurol. Psychiat., 75, p. 326.

Horney, K. Neurosis and Human Growth, London, Routledge & Kegan Paul, 1951.

Houston, W.R. (1938) The Doctor himself as a therapeutic agent, Ann. Int. Med., 11, 1416, Jnl. Med. Assocn.

Hull, C.L. Principles of Behaviour, New York, Appleton Century Crofts, 1946.

Humphrey, G. Thinking - an introduction to its psychology, London, Methuen, 1951.

Hutten, E.H. (1956) Explanation in Psychology and Physics, Brit. J. Phil. Sci., 7, 25, pp. 73-85.

Huxley, A. One and Many (Do what you will), London, Chatto & Windus, 1949.

Jacobsan, E. Progressive Relaxation, Chicago, University of Chicago Press, 1938.

Jensen, R.A. Hypochondriasis (p. 26), in Practice of Paediatrics, Vol. IV, ed. I. McQuarrie Hagerstrom, Md., W.F. Priop & Co., 1948.

Johnson, H.K. (1948) Psychoanalysis - a critique, Psychiat Quart. 22, pp. 321-328.

Jones, M., and Rapaport, R. (1955) Administration and social psychiatry, Lancet, ii, pp. 386-388.

Jung, C.G. Psychological Types, p. 69, London, Kegan Paul, Trench Trubner & Co., 1924.

Idem. The psychology of the unconscious (p. 14, Introduction, B.M. Hinkle), London, Kegan Paul, Trench Trubner & Co., 1933.

Kant, E. Critique on Judgment, Introd. pp. 41-42, tr. J.H. Bernard, London, McMillan & Co., 1914.

Karwoski, T.F., and Osbert, H.S. (1938) Color music, Psychol. Monogr. No. 50, 271

Idem., idem. and Osgood, C.E. (1942) Studies in Synaesthetic thinking, ii, The role of Form in visual response to music, J. Genetic Psychol, 26, pp. 199-222.

Keehn, J.D. (1952) Rorschach Validation I.A. Rationale, J. Ment. Sci., 98, pp. 697-706.

Idem. (1953a) Rorschach Validation II, The validity of colour shock in the diagnosis of neuroticism, J. Ment. Sci., 99, pp. 224-234.

Idem. (1953b) Rorschach Validation III, An examination of the role of colour as a determinant in the Rorschach test, J. Ment. Sci., 99, pp. 410-438.

Koestler, A. Insight and Outlook, London, McMillan, 1949.

P 360

Kowitz, B., Carter, J.T., and Addison, W.P. (1955) A comparison of chlorpromazine and reserpine in chronic psychosis, Arch. Neurol. Psychiat., 74, pp. 467-471.

Lancet (1956) i, p. 617.

Langfield, H.S. (1914) Notes on a case of chromaesthesia, Psychol. Bull., 11, pp. 113-114.

Langmuir, I. (1943) Science, common sense and decency, Science, 97, pp. 1-7.

Lederer, H.J. (1952) How the sick view their world, J.Soc. Iss., 8, No. 4.

Lee, Vernon The Beautiful - an introduction to psychological aesthetics, Cambridge at the University Press, 1913.

Levy, H. Modern Science, London, Hamish Hamilton, 1939.

Lewin, K. Field Theory in the Social Sciences, London, Tavistock Publ., 1952.

Lewis, A.J. (1953) Health as a Social Concept., Brit. J. Sociol., 4, pp. 109-124.

Ling, T.M. Mental Health and Human Relations in Industry, London, Tavistock Publ., 1954.

London, I.D. (1944) Psychologists misuse of the auxiliary concepts of physics and mathematics, Psychol. Rev., 51, pp. 266-291.

Idem. (1945) Psychology and Heisenberg's Principle of Indeterminacy, Psychol. Rev., 52, pp. 162-168.

MacDougall, W. (1920) The revival of emotional memories and its therapeutic value (iii), Brit. J. Med. Psychol., 1, pp. 23-29.

Maclean, P. (1949) Psychosomatic Disease and the Visceral Brain, Psychosom. Med., 11, 6, pp. 338-353.

Malinowski, B. Magic Science and Religion, Glencoe, Illinois, Free Press, 1948.

Malmo, R.B. Recent Advances in Psychosomatic Medicine, ed. E.D. Wittkower and R.H. Cleghorn, London, Pitman, 1954.

Marcuse, H. Eros and Civilization, London, Routledge & Kegan Paul, 1956.

Margolin, S. Psychotherapeutic Principles in Psychosomatic Medicine, in Recent Advances in Psychosomatic Medicine, ed. E.D. Wittkower and R.H. Cleghorn, London, Pitman, 1954.

Martin, K. Beloved Physician, Obituary for Joan Malleson, New Statesman and Nation, May 26th, 1956.

Masserman, J.H. (1953) Faith and Delusion in Psychotherapy, Amer. J. Psychiat., 116, pp. 324-333.

Idem. The Principles of Dynamic Psychiatry, Philadelphia and London, W.B. Saunders Co., 1955.

Masterman, M. Programming the inexactness of Language, B.B.C. Third Programme, Sept. 23rd, 1956.

Maule, H.G. (1956) Work - Pleasure or Penance?, Occup. Psychol., 30, pp. 232-241.

Mayo, Elton — The Human Problems of an industrial civilization, Harvard Univ., Boston, 1933.

Mead, G.H. — Mind, Self, and Society, Chicago, Ill., Univ. of Chicago Press, 1950.

Medical & Dental Defence Union of Scotland, 52nd Annual Report, 1954.

Medical Research Council, Industrial Health Research Council. The incidence of neurosis among factory workers, London, H.M.S.O., 1947.

Ministry of Health Report, 1955, H.M.S.O., London.

Moreno J.L. — Who shall survive? New York. Beacon House 1953

Morris, C. — Signs, Language and Behaviour, New York, Prentice Hall, 1946.

Moustakas, C.E., and Callahan, R.J. (1956) Reflections on reflection of feeling, J. Soc. Psychol, 43, pp. 323-331.

Mullahy, P. — Conceptions of Modern Psychiatry, Washington, William Alanson White foundation 1945.

Idem. — The Conceptions of Harry Stack Sullivan, New York, Hermitage House, 1952.

Munro, T.A. — (1956) Recent Advances in Psychological Medicine, Practitioner, 177, pp. 464-470.

Murphy, G. — Personality, London, Harper Bros., 1947.

Idem., and Cattell, E. Sullivan and Field Theory, in The Conceptions of Harry Stack Sullivan, ed. P. Mullahy, New York, Hermitage House, 1952.

Murray, J.B. — Some common psychosomatic manifestations, London, Oxford University Press, 1949.

Needles, R.J. — (1954) Functional Illness - Medical Enigma, J. Amer. Med. Ass., X, 186.6., pp. 585-589.

Nieman, L.J. and Hughes, J.W. (1951) The problem of the concept of role, Social Forces, 30, pp. 141. (quoted by Spiegel )

Noce, R.H., Williams, D.B., and Rapoport, W. (1954) Reserpine (Serpasil) in the management of the mentally ill and mentally retarded, J.A.M.A., 156, pp. 831-834.

Ogden, C.K., and Richards, I.A.
The Meaning of Meaning, London, Kegan Paul, Trench, Trubner, 8th Ed. 1946.

Idem, idem. and Wood, J.
The Foundation of Aesthetics, London, Geo Allen & Unwin, 1922.

O'Leary, J.L. (1956) Speculative trends in Electrophysiology, Arch. Neurol. Psychiat., 76, 2, pp. 187-197.

Osgood, C.E. (1952) The nature and measurement of Meaning, Psychol. Bull., 47, pp. 197-237.

Osler, Sir Wm. Aequanimitas, London, H.K. Lewis, 1941.

Outline of Modern Knowledge, Ch. IX, London, Gollancz, 1st Edn., 1921.

Outline of Modern Knowledge, ed. A.P. Jones, London, Gollancs, 2nd Edn., 1956.

Ozarin, L.D. (1954) Moral treatment and the mental hospital, Amer. J. Psychiat., 111, pp. 371-378.

Idem. Human Speech, London, Kegan Paul, Trench, Trubner & Co., 1930.

Pareto, V. The Mind and Society, Vol. 4, The general form of Society, London, Jonathan Cape, 1940.

Park, R.E. (1938) Reflections on Communication and Culture, Am. J. Sociol., 44, pp. 187-205.

Parsons, T. (1951) Illness and the role of the physician - a sociological perspective, Amer. J. Orthopsychiat., 21, 3, pp. 452-460.

Idem. The Social System, London, Tavistock Publications, 1952 (1952 a).

Idem. (1952 b) Illness and Therapy in the modern urban American Family, J. Soc. Issues, 8, 4

(1946). The relationship of Bernreuter scores to parent behaviour, child behaviour Urban Rural residence, and other background
Patterson, C.H. factors in 100 normal adult parents. J. Soc. Psychol., 24, pp. 3-50.

Pavlov, I.P. Lectures on Conditioned Reflexes II Conditioned Reflexes and Psychiatry, trans. W.H. Gantt, London, Lawrence & Wishart Ltd., 1942.

Pear, T.H. Voice and Personality, London, Chapman & Hall, 1931.

Idem. The Art of Study, London, Kegan Paul, Trench, Trubner & Co., 1938.

Idem. Remembering and Forgetting, London, Methuen & Co., 1922.

Pei, M. The story of language, London, Geo Allen & Unwin, 1952.

Penfield, W., and Jasper, H. Epilepsy and the Functional Anatomy of the Human Brain, London, J. & A. Churchill, 1954.

Piaget, J. The language and thought of the child, London, Kegan Paul, Trench, Trubner & Co., 1926.

Pinsent, R.J.F.H. (1951) Brit. Med. J., ii, 1335.

Polanyi, M. (1956) Passion and Controversy in Science, Lancet, 1, pp. 921-925.

Prinzhorn, H. Psychotherapy, London, Jonathan Cape, 1932.

Pumpian Mindlin, E. Psychoanalysis as Science, Stanford University Press, 1952.

Rado, S. (1953) Recent advances in psychoanalytic therapy, Ass. Res. Nerv. Ment. Dis. Proc. 31, 42. (quoted by Galdston )

Redfield, R. (1949) The Art of Social Science, Amer. J. Sociol., 54, pp. 181-189.

Riese, W. (1956) Philosophical Presuppositions of present day medicine, Bull. Hist. Med., XXX, 2, pp. 163-174.

Rogers, C. Client Centred Therapy. Boston-New York Houghton Mifflin 1951

Ross, A.S.C. (1956) U and non U, Encounter, 5, pp. 11-20.

Ruesch, J. (1954) Communication, Psychiatry, 17, pp. 1-18.

Russell, Bertrand The A.B.C. of Relativity, London, Kegan Paul, Trench, Trubner & Co., 1926.

Ryle, G. The Concept of Mind, London, Hutchinson's University Library, 1949.

Salter, A. Conditioned Reflex Therapy, London, Geo Allen & Unwin, 1952.

Sargant, W., and Slater, E. Physical Methods of Treatment in Psychiatry, E. & S. Livingstone, London & Edinburgh, 1954, pp. 310-314.

Sapir, E. Language - an introduction to the study of speech, Humphrey Milford, Oxford University Press, 1921.

Idem. (1926) Speech as a Personality trait, Amer. J. Sociol. 32, pp. 892-905.

Schoben, R.J. (1949) Psychotherapy as a problem in learning theory, Psychol. Bull., 46, pp. 366-372.

Schopenhauer, A. The World as Will and Idea, Vol. II, pp. 305-315, tr. by R.B. Haldane and J. Kemp, London, Kegan Paul, Trench, Trubner & Co., 1906.

Schrodinger, E. What is life? Cambridge at the University Press, 1944.

Skaggs, E.B. (1945) Personalistic psychology as science, Psychol. Rev., 52, pp. 234-238.

Skinner, B.E. (1945) The operational analysis of psychological terms, Psychol. Rev., 52, pp. 270-273.

Idem. Science and Human Behaviour, New York, Macmillan, 1953, esp. pp. 359-384.

Sloan, E.H. (1945) Reductionism, Psychol. Rev., 52, pp. 214-223.

Sluckin, W. Minds and Machines, Harmondsworth, Middx., Pelican Books, A.303, 1954.

Smith, F.V. The Explanation of Human Behaviour, London, Constable, 1951.

Sorokin, P.A. Social philosophies of an age of crisis, London, Black, 1952.

Spearman, C. The Nature of Intelligence, London, Macmillan, 1923.

Idem. Creative Mind, London, Nisbet & Co., 1930.

Spiegel, J.F. (1954) The social roles of doctor and patient in psychoanalysis and psychotherapy Psychiatry, 17, pp. 369-376.

Stanfield $_{C}E$ (1947) Personality repercussions of anterior poliomyelitis.Amer.J.Med.Sci.213 pp. 109-114

Stanton, A.H. (1954) Psychiatric theory in the institutional context, Psychiatry, 17, pp. 19-26.

Idem., and Schwarz, A. (1954) The Mental Hospital, London, Tavistock Publications, 1954.

Stewart, D. (1948) Psychiatry as applied to occupational health, Lancet, i, pp. 737-740.

Strachey, J. (1956) Deaf and Dumb Sciences, New Statesman & Nation, LII, 1325, p. 135.

Sullivan, H.S. Conceptions of modern psychiatry, Washington, William Alanson White Foundation, 1945.

Idem. The interpersonal theory of psychiatry, ed. H.S. Perry and M.L. Gawal, New York, W.W. Norton, 1953.

Idem. The psychiatric interview, New York, W.W. Norton, 1954.

Sullivan, J.W.N. The limitations of science London 1933 Chatto & Windus p 20

Suttie, I.D. The origins of love and hate, London, Kegan Paul, Trench, Trubner & Co., 1935.

Sykes, G. The price of technology, B.B.C. Third programme, October 11th, 1956.

Symonds, P.M. (1954) A comprehensive theory of psychotherapy, Amer. J. Orthopsychiat., 24, 4, pp. 697-712.

Szasz, T.S., and Hollender, M.H. (1956) A Contribution to the philosophy of medicine - the basic models of the doctor-patient relationship., A.M.A. Arch. Int. Med., 97, pp. 585-592.

Thompson, C. Sullivan and Psychoanalysis in The Contributions of Harry Stack Sullivan, ed. P. Mullahy, New York, Hermitage House, 1952.

Thouless, R.H. General and Social Psychology, London, University Press, 1951, p. 402.

Tourney, G., Isberg, E.M., and Gottlieb, J.S. (1955) The use of reserpine in an acute psychiatric setting, Arch. Neurol. Psychiat., 74, 328, pp. 325-328.

Toynbee, A.J. (1949) Poetic Truth and Scientific Truth in the light of History, Int. J. Psychoanal 30, pp. 143-152.

Ullman, S. The principles of semantics, Glasgow, Jackson, Son and Co., 1951.

Valentine, M. An Introduction to Psychiatry, Edinburgh, E. & S. Livingstone, 1955.

Walker, N. (1956) Freud and Homeostasis, Brit. J. Phil. Sci., 7.25, pp. 61-72.

Warren, H.C. Dictionary of Psychology, London, Geo Allen & Unwin, 1933.

Wheeler, R.H., and Cutsforth, J.D. (1922) Synaesthesia and Meaning, Amer. J. Psychol., 33, pp. 361-384.

White, M.J. Sullivan and Treatment, in "The Contributions of Harry Stack Sullivan", ed. P. Mullahy, New York, Hermitage House, 1952

Whitehead, A.N. Essays in Science and Philosophy, London, Rider and Co., 1948.

Whittaker, E.T. Space and Spirit, London, Thomas Nelson & Sons Ltd., 1946.

Whyte, W.H. (1956) Encounter, VII, 2, pp. 5-19.

Wiener, N. I am a mathematician, London, Gollancz, 1956.

Will, O.A. Intro. pp. ix-xxiii to "The Psychiatric Interview" H.S. Sullivan, New York, W.W. Norton, 1954.

Wilson, R.N. (1954) Poetic Creativity - Process and Personality, Psychiatry, 17, pp. 163-176.

Wohlgmuth, A. . A critical examination of psychoanalysis, London, Geo Allen & Unwin, 1923.

Wolff, S., Pfeiffer, J.B., Ripley, H.S., Winter, O.S., and Wolf, H.G. (1948) Ann. Intern. Med., 29, 1056-1076.

Wolpe, J. (1954) Reciprocal inhibition as the main basis of psychoterapeutic effects, Arch. Neurol. Psychiat., 72, pp. 205-226.

Woodger, J.H. Biology and Language, The Tarner Lectures, Cambridge University Press, 1952.

Woodworth, R.S., and Marquis, D.G. Psychology, London, Methuen, 1949.

Wordsworth, W. Preface to the Lyrical Ballads (2nd, edn.) in "The Poetical Works", Grand Collosseum Warehouse Co. (no date), Glasgow, pp. 535-543.

Zilboorg, G. (1952) Some sidelights on free association, Int. J. Psychoanal., 33, pp. 487-495, pp. 489-495.